




Article

The Motivation of Students at Universities as a Prerequisite of the Education's Sustainability within the Business Value Generation Context

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Abstract: The aim of this article is to identify substantial factors affecting the motivation of universities' students to be actively engaged in the education process and define recommendations for the increase of this motivation. As a result, the sustainability of education at universities will be supported, contributing to the increase of the value of human capital of students and, subsequently, to the generation of value for the stakeholder groups in those enterprises where the graduates will be employed. The research hypothesis is focused on the presence of differences in students' motivation in relation to their gender, study program, and the year of study. To effectively achieve this aim, the analysis, comparison, and the synthesis of the theoretical background was performed, using available sources of secondary data found in the pieces of domestic and foreign professional literature. The pieces of knowledge obtained were supplemented and combined with pieces of information acquired from the questionnaire survey conducted, focusing on the motivation of students of informatics and management at a university in the Slovak Republic. As tools of statistical analysis, tests of independence suitable for nominal categorical data were applied. It was revealed that young people are motivated to study at a university, specifically at the Faculty of Management Science and Informatics, mainly by the prospect of better chances in the labor market, the possibility of getting a higher salary, and higher qualification. The motivation to study at a university in order to improve the opportunity of getting employed in the labor market was more frequently perceived by women. Despite the fact that the level of teaching is considered to be high by almost 50% of the students regardless of their gender, study program, or the year of study, their motivation also stems from their expectations related to their future jobs. The students of informatics expect to have a team of friendly colleagues, delightful and stimulating working conditions, and the opportunity to do meaningful work. Among the students of management, meaningful work was replaced by the opportunity for self-fulfillment. When focusing on other factors, the differences based on the gender, study program, or the year of study were not statistically significant. Based on these findings, specific measures for the faculty's management were proposed.

Keywords: motivation; human capital investments; generation of business value; sustainability; universities

1. Introduction

The current time is characterized by open markets and rapid changes in production and sales conditions. At the same time, the risk of new economic crises emerging is still rising. To strengthen the

competitiveness of whole economies but also of the individual enterprises, it is necessary to increase the performance and efficiency, which requires the implementation of new technologies and changes in the business processes, the orientation on value management, education, and the emphasis put on the increase of the value of human capital because people represent the most important driver in enterprises and in society.

Human capital includes all the innate and during-life-acquired knowledge, skills, experience, and talent of a person [1].

The scope, structure, and focus of the investment in human capital are affected by macroeconomic as well as microeconomic factors. These include, for example, the society-wide or an enterprise's strategic goals [2], current state within the industry and the enterprise's position in the given industry [3–5], corporate culture [6], the enterprise's orientation on social responsibility [7,8], or the support of sustainability in the long term [9].

Based on the research conducted earlier [10], it was revealed that the enterprises as well as society consider the investment in education to be the most familiar form of investment in human capital. This investment serves for the increase of the level of knowledge and skills of individuals, and for the desirable change in their attitudes.

Education is provided by various institutions. These also include universities [11]. For universities to be able to provide high-quality education for the needs of the practice, they need to identify and affect the factors that motivate young people to enroll for a specific university program and to study. To secure the sustainability of education at universities [12] as well as within the implementation of the value management in enterprises [13], it is also necessary to know the wishes and expectations of students [14] related to their employment in the labor market [15], or more specifically, within the practical operation of enterprises. Accordingly, universities can plan and implement adequate measures afterwards [16]. While increasing the value of human capital via university education [17], the success achieved is influenced by multiple factors. These encompass the phase of the economic cycle, historical development, and the engagement of the country in international structures, measures of economic policy [18,19], attitude of society towards education [20], demand for the highly-qualified workforce on the side of enterprises and the overall situation in the labor market, the level of science and technology in the country [21], quality and reputation of a particular institution providing the education, quality and attractiveness of the study programs and their alignment with the current needs in the labor market, quality and attitude of the teachers to the education process, teaching methods being applied, motivation of students, etc.

A pivotal element in the process of education is represented by the students themselves. There are numerous factors affecting students during their studies, but the most important one is their motivation for studying and for becoming proficient experts within specific needs of the practice. The motivation for studying is a prerequisite for successful achievement of expected results within the education process as well as for the sustainability of this process.

This will also contribute to the increase in value generation in enterprises that employ successful graduates with high level of their human capital.

This was the reason why this particular research was focused on the identification of substantial factors that affect the motivation of students to start studying at a university and actively participate in the education process as well as their expectations related to their future jobs.

Via the identification of these factors of motivation together with the designed recommendations, this research will contribute to the solving of the issue of securing the education's sustainability (which contributes to the increase in the value of people's human capital), while respecting the requirement of enterprises for the increase in the generation of value for the stakeholder groups within the implementation of the value management concept.

The logical connection of the above-mentioned professional and scientific areas is depicted in Figure 1, and it is more thoroughly elaborated in the following sections. However, this is a typical situation happening in research when the real system is quite complex and consists of an

abundance of elements. One possible solution to coping with this issue is the application of abstraction. Following this method, the research presented in this article works only with selected aspects within the motivational readiness of university students. Subsequently, the research tries to describe the link between motivational readiness (motivation for studying) of students and the sustainability of the education system. Finally, the sustainability of the education system is connected to the increase in the human capital value of university graduates. After being employed in various enterprises, these graduates, with enhanced levels of their human capital, become valuable contributors to the value creation in those enterprises.

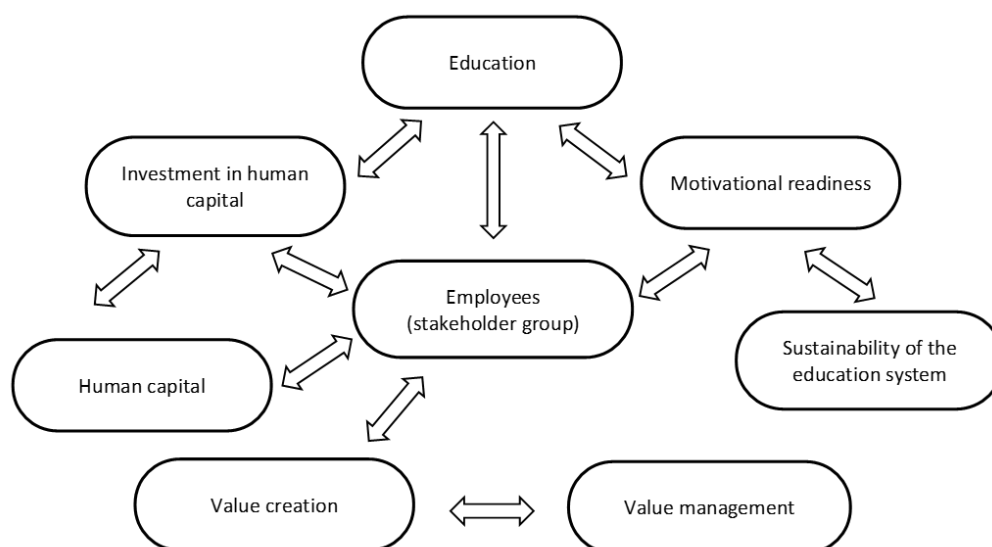


Figure 1. The logical structure of the studied topic, consisting of individual elements and their relationships.

2. Literature Review

2.1. Education and the Generation of Value

In the time of globalization and dynamic changes, education is becoming the decisive force of successful enterprises. More than ever before, it is necessary to maintain the knowledge and skills of employees at a desirable level.

The stakeholder groups of an enterprise are represented by persons, groups, or organizations that are able to affect the enterprise's existence, or that can be affected by the enterprise's activities. Such groups include the owners, creditors, employees, suppliers, customers, competitors, the government, local authorities, non-governmental organizations and pressure groups, communities, and the media. The stakeholder groups defined this way are related to the value orientation of the business. A common goal of all stakeholder groups is the long-term operation and prosperity of the enterprise. Therefore, the aspect of sustainability is important here as well. Employees, as one of the stakeholder groups, embody the carriers of human capital. Via the generation of value for the employees, the enterprise's human capital is growing. This can be determined as the intangible assets [22]. Additionally, the intangible assets represent a factor contributing to the increase of quality of internal processes, which subsequently generate the value. Other assets (machines, equipment, hardware, software, patents, copyrights, trademarks) are the sources of value generation via human capital that is in possession of the employees. Without employees and their knowledge, skills, experience, abilities, creativity, and personal traits, other assets would only be static, idle things or rights.

The generation of value for the employees, which results in the increase of human capital, is closely related to the concept of value management. This is a style of management focused especially on

people, acquisition of skills, and support of synergy and innovation with the aim to maximize the total performance of an organization [23]. Value management is a process consisting of managerial activities performed via approaches and methods used at various managerial levels of enterprises, focusing on the value.

When the principles, methods, and activities of the value management are applied, the value is being generated for the stakeholder groups, which results in their strengthened loyalty to the enterprise—an owner is willing to invest additional capital, a customer becomes a long-term customer, an employee directs his/her activities towards the fulfillment of the goals set, other stakeholder groups spread the enterprise's good name, etc. [24]. According to Obeng, it is necessary to manage relationships with the stakeholder groups, while the strategy can be focused on all or only on a few selected groups. The author uses the concept of the stakeholder concentration index [25].

The procedure of generation of value for employees starts with the expression of this value, continues with its measurement and its transformation into financial and non-financial indicators, and it ends with the determination of activities for the generation of this value. The value for employees can be expressed as an adequate basic salary, a complex system of additional benefits, job security, respecting of payday deadlines, career development and satisfaction of the needs for self-fulfillment, and so on. The measurement of this value can be expressed via the salary, bonuses, an average length of employment according to categories of employees, the number of official praises, the number of opinions expressed, and the number of proposals. The managerial activities generating the value for employees can include the offer of educational and training activities (ranging from practical training to advanced managerial courses) [26], communication of the employees' representatives with the management, increasing of the quality of working environment and positive influence on motivation, performance, and the general interest in employees within the enterprise [27]. The increase in the value is a result of an optimal combination of numerous activities and factors that need to be monitored, analyzed and incorporated in the designing of variants for the solution with the subsequent selection of the optimal one [28].

Another specific feature of human capital in enterprises is the fact that on the one side it represents a part of the enterprise's market value [29], and on the other side, it is closely connected to one of the stakeholder groups within the concept of value management, and thus the employees. The employed people expect that a rich portfolio of motivational tools will be provided for them [30–33], including, for example, meaningful work assignments, an opportunity for self-fulfillment, professional development, fair remuneration, delightful surroundings, job security, friendly atmosphere at the workplace, career advances, fringe benefits, professional management, and others. Via the fulfillment of these expectations, the value is generated for the employees, which develops the human capital available.

Among the internal stakeholders, the employees have considerable importance. Employees primarily acquire knowledge and skills from the education system. The education shall be focused on the creativity of students, independent problem solving, integration of pieces of knowledge obtained from multiple subjects studied and from multiple scientific fields [34]. Within the education process, the cooperation of three elements is necessary: The teacher, the student, and the content of the syllabus.

In the process of education, a university teacher [35,36] is a mediator of the content, who helps a student embrace the knowledge, using the selected, adequate teaching method to familiarize the student with new pieces of knowledge via the application of them in examples. The teacher also points out the common features and relationships within the content and explains the logical structure and connections of individual concepts being taught to the student. The student embraces the pieces of knowledge via his/her active approach to studying. The degree of his/her active approach is directly proportional to the teaching method the teacher selected, which considerably affects the success of the goals' fulfillment. The way of the teacher's activity influences the way of the student's activity in the process of embracing the knowledge.

Subsequently, in enterprises, the value is generated only by those employees (once being the students themselves) who

- participate in continuous education,
- have knowledge gained within multiple scientific fields,
- are able to address the managers with the products that will solve their problems and contribute to the growth of revenues, reduction of costs, increase of the productivity of labor, and to the generation of the enterprise's profit,
- are able to look at an issue from the technological as well as from the business perspective.

The education process shall react to the continuous connection of education and the employment of the graduates in the practice. The graduates will add value to the pieces of information via their interpretation and identification of connections. A precondition for potentially smart employees, managers, or owners of enterprises is represented by well-educated students. These are able to perform a survey or research, seek and select the electronically processed pieces of information needed, and synthesize them into coherent pieces of knowledge. The emphasis is put on the building of the ability of students to get oriented in the plethora of new pieces of information and the ability to utilize them.

An effective way of teaching uses progressive didactic methods and cooperative forms of work. The primary goal is to actively engage the student in the cognitive process. This is based on the cognition via activity, an active relationship of the student with the natural, economic, or social environment in which the issue is being solved [37]. This approach is oriented on the experience gained by the student, and it develops the mental structures in connection with the corresponding processes. In the case of conventional teaching methods, the student is being presented with particular, mutually isolated pieces of knowledge. The most emphasis shall be put on the creativity of students and their own solutions of the assignments, on the integration of the knowledge, and experience from multiple subjects and from real life during the solving of a particular issue. The students need to learn the abilities of self-presentation, effective communication, and self-sufficiency. Subsequently, this will be reflected in their willingness and flexibility for the solving of various problematic situations [38].

In relation to the generation of value for employees as one of the stakeholder groups, it is meaningful for the enterprise to establish cooperation with universities. The alignment and connection of the needs in the practice with the education at universities lowers the need of an employer to organize other forms of education within the enterprise, both with the general or specialized focus. The enterprise's internal education needs to be evaluated together with the strategy of employees' engagement and with the Critical Success Factors [39].

Within the concept of value management, in concordance with the theory of human capital, it is important to focus the generation of value for employees on the elimination of unwillingness of people to share the knowledge and undergo changes in their routine procedures and methods. Education significantly contributes to this. This is the case of education in enterprises but mainly of education at universities, before an individual becomes an employee.

2.2. Education and Sustainability

Numerous research studies were performed focusing on the sustainability in education and on the education for the continuous sustainable development at universities [40,41]. This research is focused on the identification of expectations and motivational factors of students at a university, specifically on the factors that can influence their decision-making on enrolling, successful studying, and finishing the studies at a university. This will support the sustainability of education at universities and contribute to the increase in the quality and value of human capital that is in possession of the graduates. When the graduates become employed, the research's results can also contribute to the increase of value of enterprises within the concept of value management.

The basic and conventional mission of the university education process is to perform professional preparation and form human capital via the connection between the education process, research, and the requirements of the labor market. Education plays a key role in the development of a

personality and engagement of individuals (as a stakeholder group), and it shall not only support the increase in general and specific theoretical knowledge and the knowledge of the world but also the effective transition of the knowledge to the surroundings and the practical application in personal and professional life. This is an important part of the university's mission since the knowledge and skills of the graduates, based on which they perform their decisions, will be able to considerably influence the quality of life of future generations from the ecological, environmental, social, cultural, economic, and personal perspectives.

The level and quality of education contributes to the sustainable development of the economy at the international as well as at the national, regional, and local level. The results of research studies point out the positive economic effect and the ability to secure sustainable development in those cities and regions in which there are universities and their graduates [42]. In addition to that, the mutual cooperation of universities with enterprises results in various innovation activities in the form of applied new technologies and patents [43]. In a synergic way, the education emphasizing the practical side of the application of the students' knowledge in the business practice increases their professional and technical competencies, cognitive and non-cognitive abilities, which enables them to get decent and adequately remunerated jobs.

Sustainable development is a broad concept that has many forms of application and that is related to the sustainability of the university education itself. For the education to be the driver of development and prosperity of economies, it is necessary to meet these conditions:

- Universities themselves need to apply the principles and goals of sustainable development and set a good example because they play an important role in society and they represent very influential parties [44]. It is also important for the management of a university to publicly declare and integrate sustainability into the strategic plans. This will lead and motivate them to actually implement different dimensions of sustainable development into practice [45,46]. Students and other university stakeholder groups often evaluate its quality based on the position in international rankings. The systems of evaluation, which focus on the current state and also monitor and quantify the effort towards sustainability of universities, include the system of evaluation according to the UI Green Metric World University Ranking (UIGM). This system evaluates the performance in the categories including the infrastructure, energy and climatic change, waste management, transport management, education, and research [47,48]. Besides that, other authors also created and described frameworks and tools for universities focused on the measurement and strengthening of the resilience of their infrastructure, culture, and systems, and on the ways of contributing to the resilience of communities [49].
- Universities need to educate their students in the field of sustainable development. This commitment explicitly means the securing of innovative educational approaches and education of a high quality with the emphasis being put on international cooperation within the field of education (study programs, mobility programs), creation of excellence in the field of skills development, support of life-long learning, and the access to education for everyone. Within this field, literature research on the key competencies and solutions for sustainable development can be useful, especially including the specific case studies focused on the form of education within the field of sustainable development [50–52] and the measurement of success of the education process [53,54].
- Universities need to operate in the conditions where the graduates can find employment in enterprises in which the management is oriented on the value and the managers want to achieve sustainable development. With this approach, the enterprise is able to solve the needs and expectations of its stakeholder groups in the long run, and it is able to create social values and support the best possible utilization of the limited resources available [55]. The sustainable management reaches its goals more effectively and more efficiently, while it is able to direct the performance with regard to the generation of value [56]. The increasing values of economic

indicators of sustainability have a multiplicative effect on the creation of new opportunities for the development of enterprises, which are affected by the regional specialization [57].

Within the economy's cycle, education of high quality, based on the principles of sustainable development, has a considerable impact on the increase of the quality of human capital, which enables the strengthening of sustainable development of enterprises and increases their value and economic prosperity of the whole country. On the other hand, this enables sustainable investment with a substantial impact in the field of university education, contributing to the sustainable development of the universities themselves.

For enterprises and universities/faculties to be able to meet the requirement of the education's sustainability and of the increase in the generation of value for the stakeholder groups, they need to identify and subsequently influence the factors that motivate students to study. This motivation represented the topic on which the questionnaire survey for the students of the selected faculty was oriented.

2.3. Motivation for Studying

A motive represents an internal reason, which causes a change in the person's behavior and leads to the fulfillment of his/her needs. The motivation for studying or for learning can be perceived in two perspectives. One is created by the motivation of the participants of particular educational activities being performed, which follow the content and the structure of the study program (internal motivation). The second perspective is represented by the motivation for the learning itself, which is affected by the expected benefits from the education (external motivation).

The key element within the realization of the education process is represented by the students themselves. Their motivational readiness for studying depends, among other things, on their emotional state, cultural and educational background, or the physical conditions in the classrooms.

There is an abundance of motivational factors. Within this research, they were divided into three groups:

- Expectations before starting the studies at a university,
- quality of realization of educational activities during the studies at a university,
- expectations and vision related to a future career.

These factors are closely related to each other and they are in a relationship of mutual influence. Therefore, the strength of motivation is the intersection of all these factors (Figure 2).



Figure 2. The factors of students' motivation at universities.

Revealing which specific elements create these three groups of motivational factors will help solve the issue of securing the education's sustainability, respecting the requirement of enterprises for the increase in the generation of value for the stakeholder groups. This can be considered to be an important contribution of this article to application of the research results into practice.

Motivation is the most important factor of university education since the studying at universities is beyond the compulsory school attendance, and thus the motivation of a university student is primarily dependent on the student's personality. In Slovakia, there is also a still present pressure on the successful completion of this type of education from the family members of a student. However, there is a difference between the motivation for studying (learning) and the motivation to only obtain the diploma or the university degree itself. In the first case, the student realizes the desirability and usefulness of the knowledge for his/her future employment and for the personal life, he/she has a strong self-motivation for the advances and cognition. In the second case, the motivation is based on the misconception that a "piece of paper" without the knowledge obtained at a university will automatically help him/her find a job in the labor market. Alternatively, it is based on the assumption that the status of a university student helps postpone the start of the working life. (In Slovakia, even though many students work part-time or have temporary jobs during the studies, the parents still tend to support them financially until they finish their studies.) This perspective can be considered mistaken, leading to incompetence in future jobs. The universities try to correct it via asking for feedback from enterprises and they try to flexibly adapt the content and scope of accredited mandatory and optional subjects.

In general, it can be assumed that the internal motivation of a university student includes the usefulness of the knowledge gained for life, obtaining the qualification for future jobs, curiosity, desire to learn something new, getting the social status of an educated person, and the value system of the student. When talking about the internal motivation, the most frequently used terms shall be the need of cognition, self-fulfillment, self-transcendence, but, at present, also the terms such as the pro-sociality and the job/mission, and the need for life-long learning.

The external motivation can encompass the expectations placed on the student, i.e., the stimuli from the labor market or the demands of employers [58], expected future salary in the given field, professional status and working conditions, social status in an explicit way, i.e., the society's perception of an educated person, the influence of the family and surroundings, or the influence of teachers at lower levels of the education system, prestige of a university, the overall environment at the university (including supportive teachers), subjects with appropriate content and purpose, motivational scholarships or job offers for the best students, lectures done by experts from the practice, internships in enterprises, job fairs, a possibility to participate in international student mobility programs, the need to be in a young and inspiring environment, and the interpersonal relationships [59,60].

The development of information-communication technology (ICT) enabled the increase of the students' motivation as well. It offers various new tools supplementing and supporting the educational process that facilitates studying and increases student engagement [61,62]. The experts then point out the fact that many students, regardless of the chosen direction of their studies, seek studying subjects that can increase their business skills and education [63,64], while these pieces of knowledge help them find better employment in the labor market or start their own businesses. The expectations of a future career are one of the motivating factors for young people to study at a university. By employing highly motivated students, enterprises will attract employees with a high level of human capital. This will also contribute to increasing business value generation for the stakeholders.

The students' motivation for studying at a particular university and their expectations about future careers was addressed in the questions asked within the questionnaire survey focused on the students.

3. Materials and Methods

The aim of the article is to identify substantial factors influencing the motivation of students at universities to actively engage in the education process and define the recommendations for the increase of this motivation so that the sustainability of this form of education is supported in the long term. This will contribute to the increase of the value of human capital of students, and, subsequently, also to the generation of value for the stakeholder groups in the enterprises in which the graduates of universities will be employed.

The effective attainment of this goal starts with the analysis, comparison, and synthesis of the theoretical background of the studied issues, based on the available pieces of secondary data found in the domestic and foreign professional literature. The studied topic overlaps several theoretical concepts and approaches. The central element is represented by the process of education (specifically university education) as a specific form of investment in human capital. Such investment increases the value of the human capital available and prolongs the period during which it is usable, as it is described in the concept of human capital management. Another perspective is added by the value management concept where education directly affects the value that the enterprise can create for the stakeholder groups. Within this concept, the employees themselves are one of the stakeholder groups. Since students will become employees in the future, it is efficient to deal with the sustainability of their motivation already at the phase of their university studies. The logic behind the theoretical background of this topic together with the interrelationships of individual elements are depicted in Figure 1.

Another step leading to the attainment of the aim is the collection of the primary data. The data points were collected via the method of sociological inquiry with the application of the questionnaire technique. The questionnaire was anonymous, focused on the students of informatics and management of the University of Zilina, Faculty of Management Science and Informatics in the Slovak Republic.

The survey was conducted in 2018, including students from the first and the second grade at the Faculty of Management Science and Informatics. The population consisted of 577 students. A total of 306 filled questionnaires were collected. This sample size put the margin of error to 3.84% at the confidence level of 99%. This survey represents a starting/preparatory exploration within the conditions of the faculty. In the future, it is planned to broaden the scope of the research, including more students at the faculty and at the partnered faculties in Slovakia and abroad.

The purpose of the inquiry was to reveal the current state of the motivation of students for studying at university and of their expectations about their future careers. The identification of students' expectations in relation to their employment in the labor market contributes to the creation of the situation where education at a university helps students obtain the qualification needed for getting jobs that will meet their wishes. The identification features of respondents included the gender, study program, and the year of study. Based on these features, the basic description of the research sample was elaborated. In the questionnaire, three questions were used in which multiple choices could be selected by a respondent. In nine questions, only one choice could be selected. Within the total number of 12 questions included in the questionnaire, in four of them the respondents could also freely express/add their own opinions. Particular questions in the questionnaire were connected to three basic groups of factors affecting the motivation of students (Figure 2). Specifically, the questions were focused on the reasons leading young people to start studying at a university (expectations before starting the studies), the perceived level of teaching (realization of teaching activities), and the expectations related to their future careers. These elements represent basic variables to be used to confirm or reject the main hypothesis underlying the whole research. The content of questions in the questionnaire follows the findings from the literature review and it is also inspired by a previous study conducted in the Czech Republic [65]. Therefore, the validity of the specific questionnaire applied in this research is supported by the application of a similarly constructed tool used in the above-mentioned study. Overall validity was enhanced by the fact that the questionnaire and its final form was checked by several experts within the field of human capital and higher education. To make sure that the tool applied in the research was inherently consistent, Cronbach's alpha was calculated.

The result value of 0.73 shows that the tool's consistency is acceptable. However, for future research projects, the tool can be altered to achieve an even higher value.

The research hypothesis was defined as follows: The motivation of students for studying differs in relation to their gender, study program, or the year of study. Here, the motivation consists of three elements included in the aforementioned variables. This way the research hypothesis indicates its decomposition into particular statistical hypotheses (e.g., the reasons leading young people to start studying at a university differ in relation to their gender). In the article, the individual sections of the results part are structured accordingly, with the questions in the questionnaire encompassing the variables applied in the hypotheses' testing. The assessment of the hypotheses is not explicitly listed, only the test results and their interpretation are included in the article.

Within the processing and interpretation of the results obtained from the primary data, specific forms and techniques of exploratory analysis were applied. The processed data outputs were appropriately listed in tables and depicted via histograms for the support of interpretation of the results achieved. The nature of the data entries themselves (categorical data) determined the application of relevant methods of statistical analysis. Depending on the number of categories, the statistically significant differences were detected via suitable methods for the testing of independence of two variables, including the Pearson's chi-squared test and the z-score related to the group of chi-squared methods, at the significance level of $\alpha = 0.05$. The Pearson's chi-squared test was applied in cases when one of the variables had more than two categories. This test identifies the presence of statistically significant differences based on the comparison of the actually observed and expected frequencies [66,67]. This method of statistical analysis is often used by researchers in various fields, for example, in the field of management, marketing, and business [68–73]. The method is also used in research projects focused on the field of education [74–77]. In cases of the questions in which the respondents could choose more than one answer, the responses were evaluated separately. This way, multiple association tables were created, encompassing the frequencies for dichotomic nominal variables. From these, z-scores were calculated to be applied in the statistical testing of hypotheses. Other research works, including those focused on the field of education, often utilize other statistical methods as well [78–82], but their application is based on working with the numeric data type.

Based on the results of the statistical analysis in combination with the findings extracted from the review of the professional literature, finally, the recommendations leading to the increase of the motivation of students for an active participation in the process of education were defined and described in the article, within the context of sustainability of the whole system.

4. Results

The results obtained from the processing of the primary data points contribute to the identification and description of the current state of the motivational readiness of students of universities for studying. High motivational readiness is a fundamental precondition for the achievement of high-quality education because it is interconnected with the effort of students to reach great studying results during their studies. Students who actively participate in the education process become qualified job seekers in the labor market after finishing their studies, they have high values of their human capital, and they subsequently become valuable employees of enterprises, contributing to the value generation in those enterprises. Only if these three phases are connected and sufficiently aligned, the sustainability of the education system in the long run can be achieved.

A basic outlook on the processed data can be gained from the description of the research sample captured in Table 1. In terms of gender, men had the majority position within the sample. In terms of the study program, the majority position was held by the students of informatics. In terms of the last identification feature represented by the year of study, the students from the first year of university studies prevailed in the research sample. Even though the proportions of individual groups in the sample are not equal, the numbers of respondents within these groups enable the application of methods of statistical analysis for the detection of differences between these groups ($n > 20$).

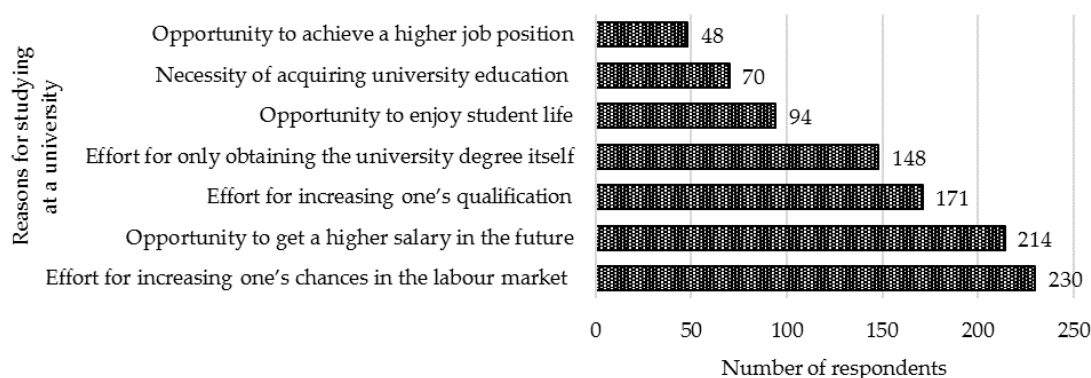
Table 1. Characteristics of the research sample.

Gender	Number	%
Male	206	67.32
Female	100	32.68
Study Program	Number	%
Informatics	193	63.07
Management	113	36.93
Year of Study	Number	%
First year	270	88.24
Second year	36	11.76

The results obtained from the survey are structured in accordance with three basic groups of factors affecting motivational readiness of students for studying. The first group of factors includes the reasons of students for starting to study at a university. The second group is connected to the realization of educational activities during the studies at a university. The last group of factors gives an account of the students' expectations in relation to their future work positions and assignments.

4.1. Reasons Leading to Studying at a University

The reasons causing students to start studying at a university represent the elemental source of their motivation during the whole studies. The aggregated results of the corresponding question from the questionnaire are captured in Figure 3 in a graphical way to enhance their interpretation.

**Figure 3.** Reasons leading to studying at a university.

The results show that the two most frequent sources of motivation for starting to study at a university are the effort for increasing one's chances in the labor market (75.16% of respondents) and the opportunity to get a higher salary in the future (69.93% of respondents). An interesting fact is that almost half the students chose the reason of only trying to get the university degree itself for the sake of having it. Contrary to the effort for increasing one's qualification, the desire to only acquire the university degree represents only a superficial interest in the studies themselves, which implies less attention paid to the content of the subjects being taught and lower interest in the active participation in the education process. The opportunity of getting a higher position was chosen only by 15.69% of respondents. This result implies that students do not fully realize that due to the university education they will be able to achieve higher job positions later in their careers. This finding thus creates space for future improvement. Implementation of appropriately directed recommendations for the process of university education can increase the perception of this advantage by the students, which will contribute to higher motivation for achieving superb study results.

Then, within the reasons leading to studying at a university, the presence of statistically significant differences based on the student's gender was analyzed. The purpose was to reveal whether there

occurs significant differentness of motives for studying at a university between men and women. Table 2 shows the results of a statistical analysis based on the testing of independence using the z-score together with the *p*-value (at the significance level of $\alpha = 0.05$) enabling the interpretation of these results.

Table 2. Reasons leading to studying at a university in relation to gender.

Reason	Men %	Women %	z-Score	<i>p</i> -Value
Effort for increasing one's chances in the labor market	69.90	86.00	3.057	0.002
Opportunity to get a higher salary in the future	68.45	73.00	0.815	0.415
Effort for increasing one's qualification	54.85	58.00	0.520	0.603
Effort for only obtaining the university degree itself	46.12	53.00	1.130	0.258
Opportunity to enjoy student life	30.58	31.00	0.074	0.941
Necessity of acquiring university education	19.90	29.00	1.777	0.076
Opportunity to achieve a higher job position	15.53	16.00	0.105	0.916

A statistically significant difference was corroborated by the test only for the motive of the effort for increasing one's chances in the labor market. Women chose this motive more often (86% of women) in comparison with men (69.90% of men). Overall, the motives of women and men were not considerably different. However, the significant difference was identified for the most frequent motive. Since we consider this motive to be a strong factor affecting the effort for achieving great study results, there is space for directing the recommendations toward the increase of perception of this form of motivation among the male students. One of the possible reasons for the difference identified is the socially-conditioned state when women can perceive their chances in the labor market as lower than those of men, and they try to get an advantage via higher education.

Then the attention was paid to the identification of significant differences in the perception of the motives based on the study program. The results of this analysis were reached via the calculation of the z-score again, and they are listed in Table 3 in a structured way, together with the corresponding *p*-values (at the significance level of $\alpha = 0.05$).

Table 3. Reasons leading to studying at a university in relation to the study program.

Reason	Informatics	Management	z-Score	<i>p</i> -Value
Effort for increasing one's chances in the labor market	74.09	76.99	0.566	0.571
Opportunity to get a higher salary in the future	69.43	70.80	0.252	0.801
Effort for increasing one's qualification	54.92	57.52	0.442	0.658
Effort for only obtaining the university degree itself	47.67	49.56	0.319	0.750
Opportunity to enjoy student life	29.53	32.74	0.587	0.557
Necessity of acquiring university education	21.24	25.66	0.888	0.374
Opportunity to achieve a higher job position	11.40	23.01	2.695	0.007

Within the research sample, there were 79.13% of male respondents studying the study program informatics, and there were 70% of women studying the study program management. Therefore, it is an interesting finding that the results of identification of differences based on the study program as the distinguishing feature did not copy the previous results obtained from the identification of differences based on the student's gender. This is supported by the fact that, in this case, the difference was not detected in the perception of the motive represented by the effort for the increase in one's chances in the labor market. The only statistically significant difference identified from the perspective of the study program was the opportunity for getting a higher job position later in the career. This motive is more often perceived by the students of management (23.01% of students of management in comparison with 11.40% of students of informatics). Such situation can actually be expected since the graduates in informatics aspire mainly to get the positions of programmers and they want to become experts in their professional field. On the other hand, the graduates in management as a study program are expected to get higher up the career ladder to the managerial positions in enterprises after some time.

The last identification feature, whose effect on the results obtained was tested via the techniques of statistical analysis, was the year of study. The purpose of this focus was the evaluation of changes in the perceived motives over time, as a result of maturing, or as a consequence of realized educational activities. In this case, the z-score was calculated once again, following the dichotomic nominal data type. The test's results with the corresponding *p*-values (at the significance level of $\alpha = 0.05$) and with the relative frequencies of the responses for the individual years of studies are listed in Table 4.

Table 4. Reasons leading to studying at a university in relation to the year of study.

Reason	First Year (%)	Second Year (%)	z-Score	<i>p</i> -Value
Effort for increasing one's chances in the labor market	74.44	80.56	0.797	0.425
Opportunity to get a higher salary in the future	70.37	66.67	0.455	0.649
Effort for increasing one's qualification	57.41	44.44	1.471	0.141
Effort for only obtaining the university degree itself	47.78	52.78	0.564	0.573
Opportunity to enjoy student life	31.11	27.78	0.407	0.684
Necessity of acquiring university education	23.33	19.44	0.522	0.602
Opportunity to achieve a higher job position	13.70	30.56	2.612	0.009

In the case of differences based on the year of study, studying the research sample, similar results were obtained to those reached when focusing on the differences in relation to the study program. This can be connected to a more detailed structure of the sample itself. The respondents from the first year of study were mainly from the study program informatics (69.63%), and, on the contrary, the students from the second year of study were mainly the students of the study program management (86.11%). Such structure of the research sample skewed the explanatory power of the differences related to the year of study.

When summarizing the partial findings within the reasons for starting to study at a university, the following conclusions were drawn that will help direct the recommendations focused on the support of the students' motivation with the aim to strengthen the sustainability of the system in the long run. The most frequent motive for starting to study at a university is the effort for the increase in one's chances in the labor market, which can be considered a very positive motive. However, within this motive, a significant difference was detected between men and women. Overall, it was revealed that the study program has a negligible effect on the reasons for starting to study at a university.

4.2. The Level of Teaching at a University

In the questionnaire survey conducted, the group of factors focused on the quality of the realization of educational activities during study at a university was represented by the question about perceived level of teaching. The aggregate results of this question are listed in Table 5.

Table 5. The perceived level of teaching at a university.

Level	Number of Respondents	%
High	167	54.75
Medium	136	44.59
Low	2	0.66

Within the research sample, 54.75% of respondents considered the level of teaching to be high and 44.59% of respondents considered it to be medium. This result can be perceived as generally positive, but there is still considerable space for future improvement. Since the realized educational activities during the studies can change and influence the direction as well as the strength of the students' motivation, this section was thoroughly examined in the research.

Again, the examination started with the identification of statistically significant differences in the perception of the level of teaching in relation to the students' gender. The number of categories of the relevant variables implied the application of the Pearson's chi-squared test and its interpretation based

on the corresponding p -value (at the significance level of $\alpha = 0.05$). The results of this test are listed in Table 6.

Table 6. The perceived level of teaching at a university in relation to gender.

Level of Teaching	Men %	Women %	Pearson's Chi-Squared Test
High	54.15	56.00	1.518
Medium	44.88	44.00	<i>p</i> -value
Low	0.98	0.00	0.678

The test's result was calculated for three degrees of freedom, with the critical value being $C = 7.815$ (at the significance level of $\alpha = 0.05$). In accordance with the corresponding p -value, the result is negative. This means that the dependence between the perceived level of teaching and the respondent's gender was not identified. Men and women perceived the level equally, which implies that during the designing and implementation of the measures for the increase of the perceived level of teaching, it is not necessary to take the students' gender into account.

The impact of the study program on the perceived level of teaching was analyzed as well. The results of the statistical testing, together with the relative frequencies, are listed in Table 7.

Table 7. The perceived level of teaching at a university in relation to the study program.

Level of Teaching	Informatics %	Management %	Pearson's Chi-Squared Test
High	50.00	62.83	5.6554
Medium	49.48	36.28	<i>p</i> -value
Low	0.52	0.88	0.130

With three degrees of freedom and the critical value of $C = 7.815$, at the significance level of $\alpha = 0.05$, the test did not confirm the presence of a statistically significant difference in the perceived level of teaching in relation to the study program. However, when looking at the relative frequencies, it can be seen that a slightly higher level was perceived by the students of management. To corroborate this tendency, it would be possible to broaden the research in the future, including a larger sample of students in it. An additional piece of information, shedding more light on the findings, is the fact that the students of management and informatics have several common subjects during the first year of their studies. Therefore, in future research, it would also be possible to filter out the impact of the common subjects on the perceived level of teaching. Subsequently, the finding obtained this way would be compared with the results of this research.

Finally, the influence of the year of study on the studied variable was analyzed. If the results from the previous section are followed, there is an assumption that while focusing on the impact of the study program and the year of study, the results obtained will be similar. The actually achieved results are listed in Table 8. The types of data entries and the number of categories led to the application of the Pearson's chi-squared test.

Table 8. The perceived level of teaching at a university in relation to the year of study.

Level of Teaching	First Year (%)	Second Year (%)	Pearson's Chi-Squared Test
High	55.93	45.71	9.171
Medium	43.33	54.29	<i>p</i> -value
Low	0.74	0.00	0.027

Due to the same number of categories in the input data, the number of degrees of freedom as well as the critical value for the test did not change (three degrees of freedom, $C = 7.815$, significance level of $\alpha = 0.05$). Based on the p -value reached, the test's result shows the presence of the statistically significant dependence between the perceived level of teaching and the year of study. This means that, in this case, the results differ when compared with those reached for the previous impact studied. The students of the first year perceive the level of teaching to be higher than the students of the second year. Within the overall concept of this research, these results represent a negative direction of the impact of the realized educational activities on the students' motivational readiness. From the perspective of the sustainability of the whole system, it would be desirable to focus on the causes of this effect more closely.

The aggregate results within the group of factors focused on the quality of the educational activities and their effect on the students' motivational readiness include these points:

- Only slightly above 50% of students consider the level of the educational activities to be high, which represents potential for further improvement,
- the dependence between the perceived level of teaching and the respondents' gender or their study program was not confirmed,
- the testing for the dependence between the perceived level of teaching and the year of study implies a negative impact of time and experience on the given variable, which means that it is desirable to direct the recommendations for future improvement toward this area.

4.3. The Students' Expectations Related to Their Future Jobs

The last group of factors affecting the students' motivational readiness is represented by their expectations and wishes related to their future careers. This group of factors is considered to be especially important since it is placed at the boundary between the education system and the labor market. In a similar way to the previous sections, the results obtained are at first presented aggregately, then they are structured into sub-sections created by focusing on the dependence between the given variable and the identification features of respondents. The aggregate results are captured in Figure 4.

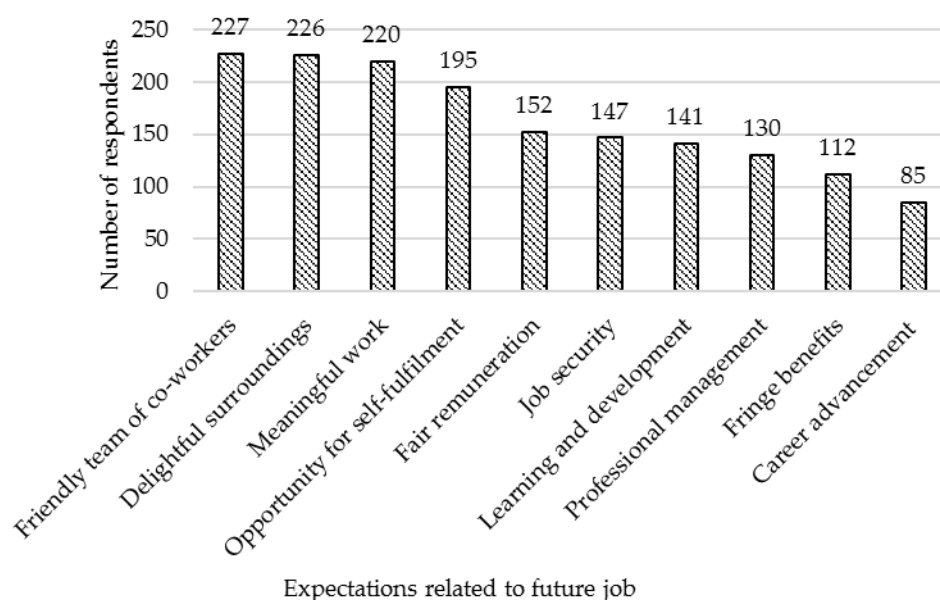


Figure 4. The students' expectations related to their future jobs.

Based on the absolute frequency of the responses, the students most frequently expect their future employment to provide them with a friendly team of co-workers, delightful surroundings at the workplace, meaningful work and work tasks, and sufficient opportunities for their self-fulfillment.

On the other hand, the least frequent expectations in relation to the future jobs were represented by the career advancement and by fringe benefits. The aggregate results reflect the opinions of the current students who, after finishing their studies, will enter the labor market. Therefore, the employers can use them as inspiration, for example, while creating and promoting new job offers.

Other findings are created by the analysis of the results from the perspective of detection of the dependence between the students' expectations and the identification features. The first identification feature was gender of respondents, the same as in the previous sections. Based on the type of the data and the number of individual categories, the z-score was calculated here. Its results, together with the relative frequencies, are listed in Table 9.

Table 9. The students' expectations related to their future jobs, with the dependence on gender being studied.

Expectations	Men %	Women %	z-Score	p-Value
Friendly team of co-workers	72.33	78.00	1.063	0.288
Delightful surroundings	69.90	82.00	2.259	0.024
Meaningful work	70.87	74.00	0.571	0.568
Opportunity for self-fulfillment	60.19	71.00	1.844	0.065
Fair remuneration	45.63	58.00	2.030	0.042
Job security	44.66	55.00	1.698	0.089
Learning and development	46.12	46.00	0.019	0.985
Professional management	40.78	46.00	0.867	0.386
Fringe benefits	32.52	45.00	2.125	0.034
Career advancement	24.76	34.00	1.693	0.090

A statistically significant dependence was detected for the following expectations: Delightful surroundings, fair remuneration, and fringe benefits. In all three cases, the expectations are more frequent among women. In a similar way to the differences identified within the reasons for starting to study at a university, the causes of the situation here can also include the socially-conditioned different behavior of women and men. The possible implications of these findings are applicable on the side of employers. In the case when the employers want to attract more women to secure the diversity of working teams, they can focus on the identified factors in their job offers.

Another part is focused on the impact of the study program on the expectations related to future jobs. The nature of the study programs themselves implies certain estimated differences. Confirmation of these differences based on the z-score and the corresponding p-values (at the significance level of $\alpha = 0.05$), together with the relative frequencies, are captured in Table 10.

Table 10. The students' expectations related to their future jobs, with the dependence on the study program being studied.

Expectations	Informatics %	Management %	z-Score	p-Value
Friendly team of co-workers	72.02	77.88	1.130	0.259
Delightful surroundings	72.02	76.99	0.955	0.340
Meaningful work	73.06	69.91	0.591	0.555
Opportunity for self-fulfillment	58.03	73.45	2.708	0.007
Fair remuneration	49.22	50.44	0.206	0.837
Job security	50.78	43.36	1.253	0.210
Learning and development	45.60	46.90	0.221	0.825
Professional management	42.49	42.48	0.002	0.999
Fringe benefits	32.64	43.36	1.879	0.060
Career advancement	23.32	35.40	2.277	0.023

The test results confirm the estimated different expectations, specifically within the opportunity for self-fulfillment and career advancement, which are more often expected among the students of

management. These two factors are more important for future managers regarding the character of this work. An important finding is that independently from the study program, the opportunity for further learning and development is not often expected by the students. In relation to the current global environment, where the emphasis is being put on the life-long learning, this result again opens space for strengthening the motivational readiness of students as a consequence of suitably designed recommendations for the changes in the education process.

Finally, the dependence between the expectations related to future jobs and the year of study was analyzed. Since the data had the same type as the data entries in the previous case, the same procedure was applied again. Its results, accompanied by the p -values (at the significance level of $\alpha = 0.05$) and the relative frequencies, are listed in Table 11.

Table 11. The students' expectations related to their future jobs, with the dependence on the current year of study.

Expectations	First Year (%)	Second Year (%)	z-Score	p-Value
Friendly team of co-workers	73.33	80.56	0.930	0.352
Delightful surroundings	71.85	88.89	2.185	0.029
Meaningful work	71.48	75.00	0.441	0.659
Opportunity for self-fulfillment	63.33	66.67	0.391	0.696
Fair remuneration	48.52	58.33	1.106	0.269
Job security	48.15	47.22	0.104	0.917
Learning and development	46.67	41.67	0.565	0.572
Professional management	43.70	33.33	1.182	0.237
Fringe benefits	36.30	38.89	0.303	0.762
Career advancement	28.15	25.00	0.396	0.692

The results show that, once again, the situation is not exactly the same as it was described for the impact of the factor represented by the study program. This supports the importance of studying the dependence of the results on the year of study separately. Based on the z-score calculated, the dependence between the expectation in the form of the delightful surroundings and the year of study was identified. Specifically, this expectation was more often among the students of the second year (88.89% of them) in comparison with the students of the first year (71.85% of them). This makes the particular expectation at the top of the list among students of the second year. This expectation can be considered to be one of the additional ones that the job seeker shall focus on only after satisfying his/her fundamental needs related to the work itself and the career path. This unexpected result, when the delightful surroundings are expected more often than e.g., the fringe benefits or the opportunities for the career advancement, elicits the need for deeper examination of the causes of this state in future research.

Overall, the results within the last group of factors affecting the motivational readiness of students revealed the following facts:

- In relation to their future jobs, students emphasize a good atmosphere at the workplace and the working conditions and interpersonal relationships, only then they focus on the work itself and on the opportunities for self-fulfillment,
- there were socially conditioned differences between genders identified in relation to the job expectations,
- the occurrence of the estimated differences based on the study program was corroborated in relation to the nature of the programs themselves,
- the results showing the differences based on the year of study do not exactly copy the situation within the study program, which confirms that this group of factors affecting the motivational readiness can change over time as well.

Based on these results, the research hypothesis was confirmed, following the specific differences described in the corresponding sections. These findings were taken into consideration while designing the recommendations for future improvement.

5. Discussion

The students' motivation to study at a university is affected by various expectations, motives and factors, including, for example, the opinions about the quality of education at a particular university, place of permanent residence [83], and others. This topic was also studied in the work done by Weberova et al. [84]. Based on the research presented in this article it was revealed that the most frequent motive for starting to study at the particular university is the effort for the increase in one's chances in the labor market. This is also corroborated by the statement of Chodasova et al. [85], saying that in the current time of globalization, education as a form of investment in human capital is an ideal platform for the improvement of the position of an unemployed person in the labor market, including its effect in the long run. Women in the survey chose this motive more often than men, which can be caused by the fact that, in the Slovak Republic, women are considered to be a disadvantaged group within the labor market, and they are trying to enhance their position via education.

On the one hand, the level of teaching is being affected by the students' approach to studying, but on the other hand, the key role is played by the teacher, including his/her competencies, willingness to continue learning new things [35,86], his/her approach to students, willingness to implement the latest knowledge into the subjects' content, and to use modern teaching methods. Teaching methods represent an important tool for the realization of the education process. The selection and suitable application of a method shall reflect the students' needs and it shall also react to the current society-wide trends in technical [87] as well as economic development. The selection of appropriate methods is also determined by various factors, such as the number of students in the study group, spatial and technical conditions, motivation of students for studying, professional level and experience of the teachers, and last but not least, by the quality and accessibility of the didactic tools and the supporting studying materials. Within this research, it was revealed that only slightly above 50% of students consider the level of education activities to be high (regardless of their gender, study program or the year of study). Therefore, there is still a huge potential for further improvement of the teacher's work and for the improvement of the content as well as the form of education and its particular activities.

It was revealed that among the students of informatics, regarding their expectations in relation to their future career, the most motivating factor is represented by a friendly team of co-workers, followed by delightful surroundings and meaningful work and work tasks. Among the students of management, meaningful work was substituted by the opportunities for self-fulfillment, which is probably a consequence of their ambition of getting managerial positions after finishing the studies. It seems that the issue of remuneration and fringe benefits is not that important for current students. This can be caused by the fact that the students of the first two years of the studies participated in the research, for whom the question of independent funding of their own needs is still a bit distant from the time perspective. Another reason can be the fact that despite the low average salary level in Slovakia, the graduates from universities, who find employment as IT professionals and managers, can achieve remuneration that is above average.

Within a wider context, the macroeconomic effects from the investment in individual components of human capital, for example, in the form of university education, lie in the increase and the sustainability of multi-factor productivity and macroeconomic performance, increase in incomes for the public budgets, growth of the life standard of citizens, and finally, in the growth of the knowledge level of people in the whole country [65,88]. In the case when the country does not pay sufficient attention to the education of citizens, economic inefficiency occurs [89], accompanied by the dissatisfaction of citizens and their possible emigration abroad.

Based on the research presented in this article, performed using the technique of a questionnaire which was created utilizing the inspiration from a particular study [65], it was revealed that young

people are motivated to study at the particular faculty due to a better chance of finding employment and getting a higher salary and qualification. The motivation to study at the faculty due to better employment in the labor market was more often perceived among women. Despite the fact that the level of teaching is considered to be high by almost 50% of the students, regardless of their gender, study program or the year of study, the motivation to study is also supported by the students' expectations related to the jobs they will do in the future. The students of informatics expect mainly a friendly team of colleagues, delightful and stimulating working conditions, and the possibility of doing meaningful work. For the students of management, the third most often expectation is the opportunity for self-fulfillment. In relation to other factors, the differences based on the gender, study program, or the year of study were not statistically significant.

The greatest motivation for young people to study at the particular faculty is a better chance of getting employment in the labor market. For better employment of graduates in the practice, it is necessary for the students to have the opportunities to connect knowledge with practice during their studies. This is an interesting source of motivation for them to learn because it contributes to a more accurate idea about their future. In teaching, the teachers need to connect the latest results of science and research from the world and from the university with examples and forms of their application in the practice even more. The students are also more inclined to accept and absorb the information from a teacher who has experience also from the outside of the school environment, or who is working on the projects assigned from the business environment.

Based on the results obtained, several measures for the Faculty of Management Science and Informatics are designed within this research, which can serve as an inspiration for other faculties and universities, even beyond the borders of the Slovak Republic. The implementation of the measures recommended can increase the motivation of students to study at the university, and specifically at the particular faculty, which will secure the sustainability of education and strengthen the reputation of the faculty among the public audience. By employing highly motivated graduates, enterprises will acquire employees with a high level of human capital. This will also contribute to increasing business value generation for the stakeholders.

If students perceive that they can achieve an advantaged position in the labor market and that their possibility of getting favorable employment is strengthened, their motivation to start studying and to study successfully, even at the particular faculty, will be increased. This will create synergy among all three areas studied: Value generation in an enterprise (as an employer), the sustainability of education, and the students' motivation.

6. Conclusions

Education, as one of the forms of investment in human capital, improves the starting position and the negotiation power of individuals in the labor market, enables them to get a higher salary, or achieve higher performance at work. The effects from the employment of highly qualified people or from the investment in human capital realized at the level of enterprises lie, for example, in the increase in the production's quality, or in the increase of the productivity and performance. The investment in human capital and its value, and the ability to efficiently utilize the human capital available, also represents an important aspect of value creation and an enterprise's competitiveness in the current dynamic, open markets. The increased care of the employees via the investment leads to higher satisfaction with the work an employee does. For the employee, this represents higher motivation for performing his/her work tasks with higher quality, and it increases his/her loyalty to the enterprise. The enterprise gets qualified, healthy, and educated employees, which increases the value of human capital of the employees and the value for the stakeholder groups of the enterprise. This way the enterprise acquires an advantage against its competitors in the market space. All of this again contributes to the sustainability of education in the country.

When approaching this from a more specific perspective, attention can be paid to the motivation of students at universities. This is being influenced by various factors. The satisfaction of students

and the sustainability of education depends on the fulfillment of these factors. Student's motivation can be affected by experience from the past, opinions of friends and acquaintances, reputation of the university, situation in the labor market, etc. The article was focused on the reasons leading the students to study at a university, the level of the teaching, and the students' expectations related to their future careers.

The recommendations for the faculty include paying heed to continuous updating of the content of the study programs being provided and to their consistent connection with the actual requirements of the labor market. These are the requirements of the enterprises as future employers of the graduates. These enterprises have a chance to get employees with high level of human capital, which will increase their value in the market. Since this factor was statistically higher among women, there is a chance to increase the motivation of girls for studying informatics at the faculty. The increase of the number of girls studying informatics currently belongs to the aims of other faculties too, and it is also a national as well as an international effort.

The level of teaching affects the resulting quality of education at universities. During the education process, the students directly interact with the teachers. The teacher is supposed to be competent and able to appropriately (e.g., via experiences and examples) explain a specific topic to a group of students. Teachers can apply various teaching styles in the process of education. Another factor of the education's quality is the portfolio of the methods utilized. When utilizing a suitable combination of different modern teaching methods accompanied by the right alignment of the learning styles of the students with the teaching styles of the teachers, the interest of the students in studying is encouraged, together with their creativity, and their critical thinking and expert argumentation are improved. This way, it is possible to enhance the quality and attractiveness of the university education as well as the readiness of the students not only for the successful passing of the exam within the given subject and the defense of the thesis, but also for the solving of common-life and work situations. This will create a precondition for the successful employment of students outside the school, thus in the practice. On the one hand, this will contribute to the sustainability of education at the faculty. On the other hand, successful graduates with high level of human capital will be a valuable asset for the enterprises in which they will be employed, and they will be able to considerably contribute to the generation of value for the enterprises' stakeholder groups. It is necessary to implement all of this within the conditions of the faculty and the university as well. It is helpful if the teachers themselves work on increasing their qualification, professional level and competencies, and they learn new and modern methods of teaching. It is important that the teacher is able to identify his/her preferred style of teaching, and after considering its advantages and disadvantages, he/she is able to use other styles as well, reacting to the learning styles of the students. It is also necessary to thoroughly and adequately often update the content of the subjects in the study program, in harmony with the world-wide trends in the specific professional fields.

Another recommendation focused on the increase in the quality of education at the faculty is to establish a program of regular training courses, focusing on new, progressive, and participative education methods, which shall be mandatory for all teachers. All of this will contribute to the sustainability of education at the faculty.

The motivational factors of the students also include the expectations related to their future jobs, being connected to a friendly working team, working conditions, meaningful work, and the opportunity for self-fulfillment. Therefore, the recommendation for the faculty's management and its employees is to regularly present these expectations at common work meetings, during specialized activities as well as at scientific conferences. These meetings include the gatherings of the IT cluster, in which the faculty represents a respected member, together with important employers and institutions of the labor market within the field of information technology. If personal managers can attract clever university graduates and create suitable working conditions aligned with their expectations, it will result in the increase in value generation in enterprises and in the increase in their competitiveness in the market.

Future research of the students' motivation can be focused on other factors and the research sample can be broadened by including students from higher grades. Since the situation in the labor market is constantly developing over time and the conditions in schools as well as in enterprises are changing, it is planned to repeat the survey regularly, after a certain period of time. Subsequently, in the future, it will be possible to perform the survey and comparison including students from partnered faculties or other universities in different countries as well.

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