



<http://dx.doi.org/10.16926/eat.2022.11.07>

Zbigniew CHODKOWSKI

<https://orcid.org/0000-0001-5114-2314>

University of Rzeszów

e-mail: zchodkowski@ur.edu.pl

## The feeling of efficiency in the opinion of the surveyed students of Rzeszów universities

---

**How to cite [jak cytować]:** Chodkowski, Z. (2022). The feeling of efficiency in the opinion of the surveyed students of Rzeszów universities. *Edukacyjna Analiza Transakcyjna*, 11, 119–134.

---

### Abstract

The sense of effectiveness plays an important role in the subjective perception of well-being by an individual. It closely relates the level of effectiveness to the expected performance of each activity. Higher expectations should release energy and affect effective results of education or professional work. The aim of this article is to analyze the sense of effectiveness in life of students who started their studies in science and humanities. For this purpose, I have carried research out based on an own project taken among 383 students of the Rzeszów University of Technology and The University of Rzeszow. The research used a diagnostic survey method, and a standardized tool to measure the level of effectiveness in life using the Generalized Self-Efficacy Scale (GSES) developed by Ralf Schwarzer and Matthias Jerusalem and prepared in Polish adaptation by Zygrfyd Juczyński.

The research showed that the students' sense of effectiveness in life was moderate. The following independent variables were taken into account: university, gender, age, place of residence and the wealth of the respondents. In two studies, there was a difference in the level of statistical significance depending on the type of university and the gender of the respondents. On the other hand, taking into account the average, students from the Rzeszów University of Technology showed a slightly higher level of sense of effectiveness in contrast to students from the University of Rzeszów. The conclusions from the research constitute a challenge for the education system, teachers at all levels of education, so that any changes, systematically introduced to the education programs, could reflect the needs of students to a greater extent.

**Keywords:** effectiveness, expectation, efficiency, education, students.

In childhood and adolescence, every person undergoes a long period of formal education in terms of multilateral development and preparation for professional work. The education system in Poland offers three levels of education: elementary, secondary, and higher. Each stage characterizes by the selection of the education path and relates to the individual's character, as well as the daily impact on her/him of both the family and school environment. The most important character traits include interests, diligence, dutifulness, responsibility, talents, unrestrained willingness to develop, and systematic work in this area. Various factors affect a person's personal and pro-professional life, as well as the level of their education and the acquisition of qualifications closely related to it.

I should note that education, as well as certain innate or gained features and systematically strengthened by work, facilitates and also brings the individual closer to achieving success. Efficiency in action and decision-making plays an important role in all human activity. The expectation and readiness precede this to perform the task, including operability and efficiency. It is noticeable especially in solving problems and overcoming various obstacles. We can, therefore, perceive the effectiveness of an individual through the prism of various activities, including the ability to achieve plans.

The aim of the article is to approximate the effectiveness based on the theory available in the literature on the subject. The empirical part focuses on the level of the sense of effectiveness in personal life among the surveyed students of Rzeszów universities.

## **Human activity in terms of effective action**

There are many ways to feel effective in your efforts to achieve results. Researchers recognize various factors that can influence every human activity. They often refer to erudition in management and management of organizations, and there they distinguish similar concepts, such as efficiency, efficiency or effectiveness (Bukłaha, 2012, p. 24). The first of the above concepts of "efficiency" results from a proper way of getting involved and managing, and also influences the specific effect of the work performed, thanks to which a specific goal achieves (Skowron-Mielnik, 2016, p. 152).

Renata Winkler (2010, p. 104), defines efficiency in two contexts: genre and qualitative. Efficiency in the genre sense refers to the reality and strives to any process, i.e. starting learning and getting the desired results as obtaining a certificate or a diploma.

Thus, it is a certain behavior of an individual defined as deliberate and conscious, and which leads to the achievement of a specific result, this results from

an earlier action. Efficiency in the qualitative sense means that the result of actions is to be real, perceptible and positive, i.e., ultimately effective.

According to Anna Mazurkiewicz (2011, p. 47–50), “efficiency of action” characterizes by the complexity of the human character, which means his ability to perform the activities entrusted to him, they concern every action, regardless of the causes or going to the intended goal. The efficiency of human activity also means various possibilities of emerging opportunities, which he can use to a greater or lesser extent, and which are significant within the area of his effectiveness.

Łucja Łuboń (2020), defines effectiveness in the Encyclopedia of Management as the ability to set the right goals, i.e., “doing the right things”. Effective action can lead to the effect intended as an end, while the measure of effectiveness is proximity to the goal.

The Canadian psychologist Albert Bandura (1977) introduced the concept of perceived self-efficacy. The author defines it as an image of the competences of an individual, equipping it with the means to carry out the intended activities. This component mainly concerns the belief of the individual that he can take a specific action and that he perseveres in achieving the intended goal. Bandura distinguished three aspects of self-efficacy, i.e., greatness, generality and strength. “Size” refers to the difficulty of the task and our sense of coping with the problem associated with it. “Generality” associates with a multitude of situations, among which specific situations may require specific inspection competencies. On the other hand, “strength” expresses the degree of confidence and trust in the scope of their competences (Wojcieszek, Nawalana, Majda 2019, p. 142).

On the other hand, Peter Drucker (1994) distinguishes between two concepts: efficiency and effectiveness. Fitness is about doing things the right way, which is an input and output concept. Effectiveness is primarily doing the right things, and therefore the ability to choose the right goals (Stoner et al. 2001, p. 24). The example of an individual who assumes a certain period of study to get a professional qualification can explain the understanding of the concept. However, after the allotted time, it does not achieve the assumed goal and therefore it is ineffective in its operation.

E.A. Locke and G.P. Latham (1990) explain that people set higher goals in their actions and become more involved when they have a stronger belief in their own effectiveness. This is not an obstacle for them, even in the event of a loss or failure of any kind.

James E. Maddux (2009, pp. 874–875) states that beliefs about self-efficacy are beliefs about people about their ability to achieve desired results from their own actions. These beliefs are one of the most important determinants of the behavior people choose to engage in and how much they will persist in their efforts when faced with obstacles and challenges. These beliefs concern your

ability to practice your skills under certain conditions – especially in changing and difficult situations, and also affect what else you can do. The author adds that self-efficacy is not a self-esteem, it is not a motive, motivation, need for control, or a personality trait.

In health psychology, the sense of self-efficacy plays a key role in transforming the intention into action, i.e., the implementation of plans, achieving the intended goals in struggling with serious diseases that threaten human life (Juczyński, 1998, p. 97).

In the lives of students, the perceived effectiveness relates to specific areas of activity in education, family life, or possibly looking for paid work. Effectiveness may also express the belief that you act in problematic or possibly new situations. In the further part of the research, effectiveness will explore farther (Juczyński, 2001, p. 93).

## Method

The subject of the empirical article is the sense of effectiveness in the lives of students of Rzeszów universities, including those studying humanities at The University of Rzeszów (UR) and science at the Rzeszów University of Technology (PR). The aim of the study is to enrich knowledge about the effectiveness and its importance in the lives of young people who have started studies at state universities in Rzeszów.

Regarding exploration, the following problems are planned: Are there any differences (and if so, what differences) in the perception of effectiveness in life among the surveyed students of The University of Rzeszow and Rzeszów University of Technology, and at what level is the sense of effectiveness among the respondents? While formulating the research questions, it took the following independent variables into account, such as university, sex, age, place of residence and the wealth of the respondents.

In all cases assumed a null hypothesis ( $H_0$ ), stating the lack of statistical significance in the studied groups according to independent variables characterized by a normal distribution. Overall, I assumed it to be moderate, an average level of perceived effectiveness in life among students, ranging from 5 to 6 Sten in standardized units.

The research carried out in the fourth quarter of 2018 in groups of students starting their studies at two universities: in humanities and in science, and covered 400 students, including 200 students of humanities at The University of Rzeszow and 200 people in science at the Rzeszów University of Technology. After thorough verification, 17 rejected because of incomplete responses. 383 questionnaires were qualified for the next stage, including 190 respondents pur-

suings the selected humanities faculty and 193 studying science subjects (Chodkowski, 2019, p. 177).

The Generalized Self-Efficacy Scale (GSES) developed in German by two authors Ralf Schwarzer and Matthias Jerusalem in 1992 (1993) was used for the research. The scale refers to the concept of expectations and self-efficacy, formulated by Albert Bandura (1977) at the end of the seventies of the last century. The research tool consists of ten questions that are part of one factor that measures an individual's strength of belief in the effectiveness of coping with difficult situations and obstacles. It is applicable to the activities of the individual in its various areas of activity. The sum of all points (maximum 40) gives you an overall indicator of your self-efficacy. A higher score means a greater sense of self-efficacy. In the interpretation, the obtained result is compared with the mean results of the normalization sample. The raw score is converted into standardized units on the Sten scale and the intensity of self-efficacy is checked. The authors of the questionnaire divided the results into three ranges: low, medium and high. Results within 1–4 of the Sten are included in the first range as low, they indicate a tendency to be ineffective in their action, from 5-6 Sten are in the average range and are considered average, in which the individual may fluctuate between the first and third compartment. The results within the range of 7–10 Sten indicate an active attitude of the individual in terms of effectiveness (Poprawa, Juczyński, 2001, pp. 93–98). Statistical calculations were performed using ANOVA. The test probability was considered significant at the level of  $p < 0.05$ , and highly significant – at the level of  $p < 0.01$  and  $p < 0.001$  (Kosiba, Gacek, Bogacz-Walancik, Wojtowicz, 2017, p. 82). The SPSS Statistics program was used to perform the calculations.

## Results

The research carried out at two universities: The University of Rzeszow and the Rzeszów University of Technology. The faculties in which a comparable number of both women and men study.

Table 1  
*Sex of respondents according to the division into universities*

University	Sex of respondents					
	Women	%	Men	%	Total	%
University of Rzeszów (UR)	120	63,2	70	36,8	190	100
Rzeszów University of Technology (PR)	119	61,7	74	38,3	193	100

Source: own research.

The data in Table 1 present the sex of the respondents broken down by university. Women are an advantage at both universities, the average of which is 62.45% of all respondents.

Table 2  
*Respondents' place of residence by university*

University	The place of residence					
	Village	%	City	%	Total	%
University of Rzeszów (UR)	97	51,1	93	48,9	190	100
Rzeszów University of Technology (PR)	122	63,2	71	36,8	193	100

Source: own research.

The next table no. 2 presents the results of the respondents' residence according to the University. Students from The University of Rzeszow slightly predominantly live in the countryside – 51.1%, while among the respondents from the Rzeszów University of Technology, the sum of students from rural areas is slightly higher and amounts to 63.2%.

The data in Table 3 concern the calculation of the statistical sense of effectiveness in the life of students according to the university. In this study, the groups belong to different colleges and the comparison is between science and humanities. Science is the domain of polytechnic universities, while the humanities relate to a greater extent to universities. The former requires a good knowledge of mathematics, numeracy skills and the use of appropriate formulas or functions. Therefore, studying science is generally considered more difficult compared to the humanities.

The results in Table 3 confirm this differentiation and, according to calculations, it is at a high level of statistical significance, where  $p < 0.003$ . The raw result converted into Sten units in both groups is 5. However, taking into account the average of the obtained calculations, students from Rzeszów University of Technology have an advantage and it is higher by 1.6162 units. It follows those respondents from exact sciences, with mathematical skills and problem-solving skills, have a slightly higher sense of effective action compared to their peers from the University of Rzeszów. Cronbach's alpha above 0.800 indicates the reliability of the questionnaires used. On the other hand, eta square (0.23) and omega square (0.64) indicate a high strength of the effect.

The effectiveness of action depends on many factors, which include, among others: the way an individual brought up, his education, psycho-physical properties of the organism, interests, activities, internal and external motivations, talents, proper development and systematic expansion of knowledge. Most of the students use the above factors to a varying degree. Usually, one of their main goals is the pursuit of graduation, i.e., getting the qualifications, opening the possibility of starting a professional career.

Table 3  
The sense of effectiveness in the lives of students by university

Uni- versi- ties	Statistics									Sten	
	$\alpha$	N	%	Sum	M	SE	Me	SD	SD <sup>2</sup>		
UR	,856	190	49,61	4881,00	25,6895	,39393	26,0000	5,43002	29,485	5	
PR	,845	193	50,39	5270,00	27,3057	,36345	27,0000	5,04922	25,495	5	
Total	,851	383	100	10151,00	26,5039	,27066	27,0000	5,29688	28,057	5	
		ANOVA					Measure of relationship				
		SS	df	MS	F	p	$\eta$	$\eta^2$	$\omega^2$		
Between groups*		250,101	1	250,101	9,103	,003	,153	0,23	0,64		
Inside the group		10467,643	381	27,474							
Total		10717,744	382								

\* – combined, N – number of samples M – mean, SE – Standard mean error, Me – Median, SD – Standard deviation, SD2 – Variance, SS – sum of squares, df – degrees of freedom, MS – mean square, F – distribution, F-Snedecor statistics, p – significance level,  $\eta$  – Eta,  $\eta^2$  – Eta square,  $\omega^2$  – omega square

Source: own research.

Table 4  
Effectiveness on the lives of students by sex

Sex	Statistics									Sten	
	$\alpha$	N=383	100%	Sum	M	SE	Me	SD	SD <sup>2</sup>		
Women	,865	239	62,4	6220,00	26,0251	,34722	26,0000	5,36791	28,814	5	
Men	,828	144	37,6	3931,00	27,2986	,42470	27,5000	5,09639	25,973	5	
Total	,846	383	100	10151,00	26,5039	,27066	27,0000	5,29688	28,057	5	
		ANOVA					Measure of relationship				
		SS	df	MS	F	p	$\eta$	$\eta^2$	$\omega^2$		
Between groups*		145,735	1	145,735	5,252	,022	,117	0,14	0,37		
Inside the group		10572,009	381	27,748							
Total		10717,744	382								

\* – combined, N – number of samples M – mean, SE – Standard mean error, Me – Median, SD – Standard deviation, SD2 – Variance, SS – sum of squares, df – degrees of freedom, MS – mean square, F – distribution, F-Snedecor statistics, p – significance level,  $\eta$  – Eta,  $\eta^2$  – Eta square,  $\omega^2$  – omega square

Source: own research.

Based on Table 4, the sense of effectiveness of action among the respondents according to gender is at the level of statistical significance  $p < 0.022$ . The raw score converted into Sten units in both groups is 5. This means that the sense of effectiveness for both women and men is in the medium, i.e., moderate range. In this arrangement, there are two options. An individual may oscillate between the first range, which is dominated by pessimism, and the third, which is reserved for optimism (good cheer). On average, males gain a slight advantage over females by over 1.2735 units. Greater effectiveness in men depends on many factors, which include tradition, a stronger influence on achieving independence, the possibility of receiving more gratification for work, the desire to dominate the family, etc. Hence, men have higher expectations in terms of multilateral development, professional career, and may also be more effective than women in their activities. In the case of choosing studies in the field of science, there are also greater opportunities to find a job and receive higher earnings compared to students in the humanities, who are threatened by the „specter” of unemployment. Cronbach’s alpha above 0.80 informs about the reliability of the questionnaires used, and more specifically about the internal consistency of the tool. Eta square –  $\eta^2$  equals 0.14, it means an effect of medium strength, while more precise omega-square calculations,  $\omega^2 = 0.37$ , are characterized by high strength of the effect.

Man’s adolescence plays an important role in his daily explorations in search of a suitable place both in the life and work environment. The latter is becoming more and more a point of reference to the place of residence. Based on statistics from recent years, young people have been systematically leaving their places of residence because of the lack of employment prospects. Some people also go abroad in search of work. The educated effectiveness of an individual in achieving goals facilitates faster adaptation to new living conditions.

Based on Table 5, the effectiveness of the surveyed students by age is not statistically significant because  $p > 0.05$ . The raw result converted into Sten units is predominantly moderate and on the Sten scale it is between 5 and 6. Cronbach’s alpha is above 0.70 and means the reliability of the questionnaires used in the study, while the Eta square is 0.29, and the omega-square – 0.77. Both results indicate the high strength of the effect.

In another study, the independent variable was the respondents’ place of residence and their perception of effectiveness in everyday student and personal life. The environment of growing up to adulthood plays an important role in education and develops a certain operational efficiency and coping skills in the future.

Based on the data in Table 6, it is noticeable that the different places of residence of the respondents do not affect the differentiation in the level of statistical significance, where  $p > 0.05$ .



Table 5  
Life effectiveness of students by age

Age	α	N=383	100%	Statistics						Sten
				Sum	M	SE	Me	SD	SD <sup>2</sup>	
17	,526	3	0,8	71,00	23,6667	1,45297	24,0000	2,51661	6,333	4
18	,867	21	5,5	560,00	29,6667	1,16565	27,0000	5,34166	28,533	5
19	,844	231	60,3	6038,00	26,1385	,33788	26,0000	5,13537	26,372	5
20	,864	94	24,5	2588,00	27,5319	,54446	27,5000	5,27869	27,865	5
21	,926	17	4,4	431,00	25,3529	1,61778	27,0000	6,67028	44,493	5
22	,602	5	1,3	138,00	27,6000	1,63095	28,0000	3,64692	13,300	5
23	,467	6	1,6	171,00	28,5000	1,40831	29,5000	3,44964	11,900	6
24	,887	3	0,8	65,00	21,6667	4,63081	21,0000	8,02081	64,333	3
26 and more	,947	3	0,8	89,00	29,6667	6,00925	33,0000	10,40833	108,333	6
Total	,770	383	100	10151,00	26,5039	,27066	27,0000	5,29688	28,057	5

  

	ANOVA				Measure of relationship			
	SS	df	MS	F	p	η	η <sup>2</sup>	ω <sup>2</sup>
Between groups*	307,524	8	38,440	1,381	,203	,169	0,29	0,77
Inside the group	10410,220	374	27,835					
Total	10717,744	382						

\* – combined, N – number of samples M – mean, SE – Standard mean error, Me – Median, SD – Standard deviation, SD2 – Variance, SS – sum of squares, df – degrees of freedom, MS – mean square, F – distribution, F-Snedecor statistics, p – significance level, η – Eta, η<sup>2</sup> – Eta square, ω<sup>2</sup> – omega square

Source: own research.

Table 6  
Effectiveness in the life of students and place of residence

Place of residence	α	N=383	100%	Statistics						Sten
				Sum	M	SE	Me	SD	SD <sup>2</sup>	
Village	,864	219	57,5	5776,00	26,3744	,36093	27,0000	5,34124	28,529	6
Small town up to 20 000	,811	67	17,5	1777,00	26,5224	,60540	26,0000	4,95543	24,556	6

Table 6 (cont.)

Place of residence	$\alpha$	N=383	100%	Statistics						Sten	
				Sum	M	SE	Me	SD	SD <sup>2</sup>		
Medium city 20 000-100 000	,851	53	13,8	1412,00	26,6415	,73286	26,0000	5,33528	28,465	6	
Big city over 100 000	,875	44	11,5	1186,00	26,9545	,85525	27,5000	5,67309	32,184	6	
Total	,850	383	100	10151,00	26,5039	,27066	27,000	5,29688	28,057	6	
				ANOVA			Measure of relationship				
				SS	df	MS	F	p	$\eta$	$\eta^2$	$\omega^2$
Between groups*				13,633	3	4,544	,161	,923	,036	,001	0,028
Inside the group				10704,111	379	28,243					
Total				10717,744	382						

\* – combined, N – number of samples M – mean, SE – Standard mean error, Me – Median, SD – Standard deviation, SD<sup>2</sup> – Variance, SS – sum of squares, df – degrees of freedom, MS – mean square, F – distribution, F-Snedecor statistics, p – significance level,  $\eta$  – Eta,  $\eta^2$  – Eta square,  $\omega^2$  – omega square

Source: own research.

It can also conclude that the different places of residence of the respondents do not make up differences in achieving the goals, and also show the average range of perception of effectiveness, which after conversion to the Sten scale is 6. Cronbach's alpha is in the range above 0.800 and means that the test is reliable, i.e., there is an internal consistency of the questionnaire. On the other hand, Eta square ( $\eta^2$ ) is a weak effect as it is equal to 0.01, as opposed to omega-square –  $\omega^2$ , which is 0.028, and gives the average (moderately average) effect of the reliability of the questionnaire.

The economic wealth of the respondents influences the greater potential for expanding knowledge. Considering information and communication technologies and the use of technological resources as hardware and software, students who have the devices and the programs, or who have unlimited access to them, do better.

Table 7  
Effectiveness in the life of students and their wealth

Statistics										
Affluence	$\alpha$	N=383	100%	Sum	M	SE	Me	SD	SD <sup>2</sup>	Sten
Wealthy	,886	44	11,5%	1227,00	27,8864	,90583	28,0000	6,00858	36,103	5
Average	,844	321	83,8%	8482,00	26,4237	,28652	27,0000	5,13334	26,351	5
Below the average	,876	18	4,7%	442,00	24,5556	1,37490	23,5000	5,83319	34,026	4
Total	,869	383	100	10151,00	26,5039	,27066	27,0000	5,29688	28,057	5

  

	ANOVA					Measure of relationship		
	SS	df	MS	F	p	$\eta$	$\eta^2$	$\omega^2$
Between groups *	154,488	2	77,244	2,779	,063	,120	,014	0,39
Inside the group	10563,256	380	27,798					
Total	10717,744	382						

\* – combined, N – number of samples M – mean, SE – Standard mean error, Me – Median, SD – Standard deviation, SD<sup>2</sup> – Variance, SS – sum of squares, df – degrees of freedom, MS – mean square, F – distribution, F-Snedecor statistics, p – significance level,  $\eta$  – Eta,  $\eta^2$  – Eta square,  $\omega^2$  – omega square

Source: own research.

Table 7 shows the efficacy results according to the wealth of the subjects. Based on the calculation, the index “p” is slightly greater than 0.05. However, with the respondents, this results in a lack of statistical significance between the wealth ranges. After conversion to the Sten scale, for the respondents from the following ranges: affluent (11.5%) and average (83.8%) it is 5. This means that they perceive their effectiveness in life at an average level. Only the representatives from the “affluent” segment obtained the highest percentage, amounting to 27.89 units, which is higher by 1.46 than the respondents in the “average well-off” range. On the other hand, respondents from the economic range below the average (4.7%) received the number 4 on the Sten scale, which means a low level of effectiveness, i.e., it indicates a tendency to be ineffective in action. These people constitute the smallest percentage of the respondents. Cronbach’s alpha is greater than 0,800 and indicates that the test is reliable. Eta square (0.14) is the mean effect as opposed to omega-square (0.39) which gives the effect of high reliability of the questionnaire.

## Conclusions

The article explains the concept of effectiveness based on the literature on the subject and presents the sense of effectiveness among students of Rzeszów universities according to the research and calculations.

The sense of effectiveness undoubtedly translates into the mental and physical well-being of people of all ages. Effectiveness at a high level contributes to faster achievement of the intended goals, which result from the personal and professional plans of the individual. Effectiveness also means expectation and, greater efficiency, and above all, activity in action. Each positive effect shapes the individual's satisfaction, and this significantly influences the motivation to continue working. However, feeling the effectiveness at a low level negatively affects the overall functioning of the individual. Often times, it can cause destructive actions in all areas that a person undertakes. A pessimistic attitude to life and professional work strengthens uncertainty, minimizes motivation and does not bring satisfaction with the results achieved, because there may not be such results at all, and if they do occur, they may be too insignificant.

In research on effectiveness, the authors consider various attitudes of a person, which include their resources, as well as those related to character traits or various factors systematically shaping attitudes, perception of the environment, personal development or the desire to achieve planned goals. Researchers compare at least two attitudes and analyze the interdependencies between them. According to Zygfryd Juczyński (2001, p. 94–97), the sense of self-efficacy makes it possible to predict intentions and actions in various areas of human activity. It is a determinant of intentions and actions also in the areas of health behaviors. The author shows that based on the results of the research in the English version, a positive correlation was obtained with self-esteem RSES – 0.52, sense of internal control MHLCS – 0.40, and with LOT-R optimism – 0.49. The sense of effectiveness in the Polish version positively correlates with high self-esteem, self-acceptance and an optimistic attitude.

This study limited to comparing the sense of effectiveness in action in terms of independent variables and determining its level on a three-point scale as low, medium (moderate) and high. The research carried out among students of the humanities of The University of Rzeszow and students of science of the Rzeszów University of Technology. The research adopted the definition of self-efficacy, which plays a key role in the transformation of intention into action, and mainly concerns the belief of an individual that he will endure to the end when taking a specific action (Juczyński, 1998). Independent variables used in the research concerned university, gender, age, place of residence and wealth. The calculations showed that there is a difference in the level of statistical significance de-

pending on the type of university (Table 3) and gender of the respondents (Table 4), where  $p < 0.05$ .

In these cases, the null hypothesis  $H_0$  rejected, and the alternative hypothesis  $H_1$  accepted. The test results in Table 3 differentiate the studied groups in a high level of statistical significance, and the measure of relationship shows a strong effect. Students from the Rzeszów University of Technology (50.39%) show a slightly higher level of sense of efficiency in life, because the average for them is 27.5, and students from The University of Rzeszow got (49.61%), average of 26. Research results by sex (Table 4) showed that there was a variation in the level of statistical significance where the relationship measure showed a high effect. When comparing the arithmetic mean, men got slightly higher (27.3) compared to women (26). In the remaining calculations according to the following independent variables: age, place of residence, wealth, no differences were found in the level of statistical significance, where  $p > 0.05$ . Therefore, in these cases, the null hypothesis  $H_0$  was left. In all studies, after converting the results to the Sten scale, in the vast majority of respondents, the level of the sense of effectiveness in the lives of students was moderate.

Although the presented results are very similar to the temporary Polish standards, it does not mean that the sense of effectiveness among academic youth is sufficient. Probably, young people have problems with setting their living standards, and especially with choosing a field of education, which most times differs from their interests and talents, and is often the result of pressure from parents or family, as well as because of popularity. A negative aspect of youth development is the fact that they lead a passive lifestyle, so they rarely set life goals for themselves, are not interested in the labor market, do not work actively in organizations or various academic structures, and the worst of this is that they only treat studies for the receipt of a diploma. This is reflected, *inter alia*, in my research results in the field of motivation to undertake studies, in which the career counselor had no influence on the choice of the field of study - the obtained responses exceeded 84% (Chodkowski, 2021a, p. 136). Other studies on the sense of satisfaction with the life of students have shown that more than half of the respondents' experience life satisfaction at an average level of 50.39%, and slightly less, as much as 49.61%, indicate its low level (Chodkowski, 2021a, p. 172).

Małgorzata Pietras-Mrozicka (2016, p. 35), emphasizes that proper reinforcement of optimistic attitudes may open a wide field of activity for the creators of aid activities and people working with people with low quality of life because of various factors shaping the forms of functioning of the individual. In education, social and health policy addressed to these groups, it is worth considering their systematic development aimed at increasing the effectiveness of its implementation.

Everyone has giftedness by nature, so it is advisable to create opportunities for development in an area where specific predispositions are noticeable. In the process of education, teachers and parents are to perceive talents and influence their development, in line with the interests, talents and innate abilities of the individual. This type of attitude on the part of teachers and parents will result in better results and increase the effectiveness of achieving the goals in the field of education path in terms of preparing the individual for the profession (Chodkowski, 2021b, p. 76).

The average level of the sense of effectiveness in life among the respondents is therefore a challenge for the education system, teachers at all levels of education. Any changes, systematically introduced to the curricula, are to reflect the needs of students, be in line with the changing labor market, and should also improve the responsible choice of the education path and, the commencement of appropriate professional work.

James E. Maddux aptly notes (2009, p. 876) that self-efficacy is not a trait and should not to measure. Instead, performance measures should be specific to the field of interest (e.g., social skills, exercise, diet, arithmetic skills). Within a domain, self-efficacy beliefs can be measured to varying degrees of behavioral and situational specificity, depending on what you are trying to predict. Therefore, the measurement of self-efficacy should be designed in such a way as to capture the multifaceted nature of the behavior and the context in which it occurs. Determining behaviors and contexts improves the predictive power of self-efficacy measures, but such specificity can reach the point of diminishing returns if taken too far. Therefore, the researcher needs to „know the territory” and have a thorough understanding of the behavioral domain in question, including the types of abilities required and the range of situations in which they can be used.

In order to broaden the knowledge about the effectiveness of actions, it is advisable to conduct further research in order to better diagnose and verify students' attitudes towards personal life and pro-vocational education. As Juczyński writes (after Zakrzewski, 1987), faith in one's own abilities is conducive to achieving success and releases additional energy, but also everyone also needs the right abilities and skills. The research should first of all consider the actual abilities of the individual, because unrealistic optimism may lead to various disappointments, as well as reduce the effectiveness of actions (Juczyński, 2001, p. 98).

## References

- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman.
- Bukłaha, E. (2012). Sukces, skuteczność i efektywność w zarządzaniu projektami. *Studia i prace Kolegium Zarządzania Finansami*, 113, 24–34.

- Chodkowski, Z. (2019). Plany zawodowe studentów pedagogiki Uniwersytetu Rzeszowskiego w kontekście miejsca ich zamieszkania. *Zarządzanie Publiczne*, 2(46), 171–187; <http://dx.doi.org/10.4467/20843968ZP.19.011.10687>.
- Chodkowski, Z. (2021a). Wpływ środowiska na motywację do wyboru studiów przez studentów rzeszowskich uczelni. *Przedsiębiorczość – Edukacja*, 17(1), 126–139.
- Chodkowski Z. (2021b). Predyspozycje i możliwości zatrudnienia a motywacja wyboru kierunków studiów. *Kultura Społeczeństwo Edukacja*, 1(19), 62–80.
- Chodkowski, Z. (2021b). Poczucie satysfakcji życiowej wśród studentów uczelni rzeszowskich. *Studia Pedagogica Ignatiana. Mistrzostwo w nauce i edukacji*, 24(3), 155–175.
- Drucker, P.F. (1994). *Menedżer skuteczny*. Warszawa: Nowoczesność.
- Juczyński, Z. (1998). Od decyzji do działania: model wyjaśniający zachowania suicydalne. *Acta Universitatis Lodzensis, Folia Psychologica*, 2, 3–13.
- Kosiba, G., Gacek M., Bogacz-Walancik A., Wojtowicz A. (2017). Zachowania prozdrowotne a satysfakcja z życia studentów kierunków nauczycielskich. *Teraźniejszość – Człowiek – Edukacja*, 20, 2(78), 79–93.
- Locke, E.A., Latham, G.P. (1990). *A Theory of Goal Setting and Task Performance*. New York: Prentice Hall.
- Łubóń, Ł. (2020). Skuteczność. In: *Encyklopedia zarządzania*, <https://mfiles.pl/pl/index.php>.
- Maddux, J.E. (2009). Self-Efficacy. In: S.J. Lopez (ed.), *The Encyclopedia of Positive Psychology* (pp. 874–880). The Clifton Strengths Institute and Gallup, Blackwell Publishing Ltd.
- Mazurkiewicz, A. (2011). Sprawność działania – interpretacja teoretyczna pojęcia. *Nierówności Społeczne a Wzrost Gospodarczy*, 20, 47–57.
- Pietras-Mrozicka, M. (2016). Posiadane zasoby osobiste (optymizm i poczucie własnej skuteczności) a ocena jakości życia. Analiza współzależności. *Acta Universitatis Lodzensis Folia Sociologica*, 57, 19–38; <https://doi.org/10.18778/0208-600X.57.02>.
- Poprawa, A., Juczyński, Z. (2001). Test Orientacji Życiowej – LOT-R. In: Z. Juczyński, *Narzędzia Pomiaru w promocji i psychologii zdrowia* (pp. 60–70). Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- Scheier, M.F., Carver, C.S. (1985). Optimism, coping and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4(3), 219–247.
- Scheier, M.F., Carver, C.S., Bridges, M.W. (1994). Distinguishing optimism from neurotism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67(6), 1063–1078.

- Skowron-Mielnik, B. (2016). Paradoks efektywności pracy – między budowaniem zaangażowania a wypaleniem zawodowym. *Nauki o Zarządzaniu Management Sciences*, 2(27), 151–163; <http://dx.doi.org/10.15611/noz.2016.2.13>.
- Stoner, J., Finch, A. Freeman, R.E., Gilbert, D.R. (2001). *Kierowanie* (transl. A. Ehrlich). Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Winkler, R. (2010). Efektywność – próba konceptualizacji pojęcia. *Zeszyty Naukowe*, 820, 103–114.
- Wojcieszek, A., Nawalana, A., Majda, A. (2019). Poczucie optymizmu oraz własnej skuteczności Małopolskich pielęgniarek korzystających z kształcenia podyplomowego. *Pielęgniarstwo Polskie*, 2(72), 141–147.
- Zakrzewski, J. (1987). Poczucie skuteczności a samoregulacja zachowania. *Przebieg Psychologiczny*, 3, 661–678.

## Poczucie skuteczności w opinii badanych studentów rzeszowskich uczelni

### Streszczenie

Poczucie skuteczności odgrywa ważną rolę w subiektywnym odczuwaniu dobrostanu przez jednostkę. Poziom skuteczności jest ściśle związany z oczekiwaniami w trakcie wykonywania każdej czynności. Większe oczekiwania powinny wyzwać energię i wpływać na skuteczniejsze efekty kształcenia bądź wykonywanej pracy zawodowej. Celem niniejszego artykułu jest analiza poczucia skuteczności w życiu studentów, którzy rozpoczęli studia na kierunkach ścisłych i humanistycznych. Badania wykonano na podstawie własnego projektu zrealizowanego wśród 383 studentów Politechniki Rzeszowskiej i Uniwersytetu Rzeszowskiego. Do badań wykorzystano metodę sondażu diagnostycznego i standaryzowanego narzędzia badającego poziom skuteczności w życiu z wykorzystaniem Skali Uogólnionej Własnej Skuteczności (Generalized Self-Efficacy Scale – GSES) opracowanej przez Ralfa Schwarzera i Matthiasa Jeruzalema i przygotowanej w polskiej adaptacji przez Zygryfda Juczyńskiego.

Badania pokazały, że poczucie skuteczności w życiu studentów kształtowało się na poziomie umiarkowanym. Wzięto pod uwagę następujące zmienne niezależne: uczelnia, płeć, wiek, miejsce zamieszkania i zamożność respondentów. W dwóch badaniach istniało zróżnicowanie w poziomie istotności statystycznej w zależności od rodzaju uczelni i płci badanych. Natomiast biorąc pod uwagę średnią, studenci z Politechniki Rzeszowskiej przejawili nieco wyższy poziom poczucia skuteczności w przeciwieństwie do studentów z Uniwersytetu Rzeszowskiego.

Wnioski z badań stanowią wyzwanie dla systemu edukacji, nauczycieli, wychowawców na wszystkich poziomach kształcenia, aby wszelkie zmiany, systematycznie wprowadzane do programów kształcenia, mogły odzwierciedlać potrzeby studentów w większym zakresie.

**Słowa kluczowe:** skuteczność, oczekiwanie, efektywność, edukacja, studenci.