LUBELSKI ROCZNIK PEDAGOGICZNY
T. XLIII, z. 3 – 2024

DOI: 10.17951/lrp.2024.43.3.101-117

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COMPARISON OF THE PROFESSIONAL COMPETENCIES OF STUDENTS PREPARING FOR THE PROFESSION OF PRESCHOOL AND PRIMARY SCHOOL TEACHERS UNDER DIFFERENT FORMS OF STUDY*

Introduction: The reform of higher education and especially of teaching faculties in recent years has introduced significant changes aimed at improving the quality of professional preparation and acquiring the necessary teaching competencies and qualifications. This article presents the results of a study on the self-assessment of professional competence, conducted among female students of full-time and part-time second degree programs.
Research Aim: The purpose of the study was to compare the self-assessment of the professional competence of those preparing to become preschool and primary school teachers under different forms of study.
Research Method: The study used the Popular Questionnaire of Emotional Intelligence (PKIE), the PROKOS Questionnaire, the Self-Assessment of Teaching Competence survey questionnaire and the author's survey questionnaire.
Results: The study of female students graduating with a degree in pedagogy and preschool and primary school education showed no statistically significant differences in emotional intelligence and social competence. Statistically significant differences occurred only in two cases in the

* Suggested citation: Surma, B., Rostek, I., Twardowska-Staszek, E. (2024). Comparison of the Professional Competencies of Students Preparing for the Profession of Preschool and Primary School Teachers Under Different Forms of Study. *Lubelski Rocznik Pedagogiczny*, *43*(3), 101–117. http://dx.doi.org/10.17951/lrp.2024.43.3.101-117

assessment of their own teaching competence (cooperation with parents and knowledge of the field of mathematics teaching).
Conclusions: In order to reduce the differences in the assessment of substantive competencies in science subjects, it is necessary to involve students more in non-formal further education activities, and in the framework of internships to take into account the need to develop the competence of cooperation with families (especially full-time students).

Keywords: competence, teacher competence, emotional intelligence, preschool teacher, primary school teacher

INTRODUCTION

Despite many pedeutological considerations and attempts to develop a concept, model or standards for teacher education aimed at achieving the greatest effectiveness in preparing to work with children and adolescents, the problem is still open (Michalski, 2019). The very rich output of Polish pedeutologists (Kwiatkowska, 1988; Okoń, 1998; Gołębniak, 1998; Lewowicki, 2007; Bauman, 2011; Szempruch, 2016; Śliwerski, 2017) recognizes several basic currents of teacher education (called models, concepts), which are an important source for constructing programs and improving the quality of education of future teachers in the context of the challenges of the 21st century.

The changes, which were introduced in many Polish universities in the 2018/19 academic year, were a response to criticism of the so-called Bologna Process and, at the same time, were an attempt to introduce a new model of preschool and primary school teacher training program. Between 2018 and 2023, the preparation of future teachers was often carried out in two tracks. Part-time studies were implemented in the 3+2 system, while full-time studies were implemented in the five-year master's degree system. This was an opportunity to conduct comparative research, focusing on the assessment of the students' own professional competence, graduating in parallel, but in different modes and forms, but at the same university. The purpose of the research was not to verify the curricular and systemic changes introduced in the education of future teachers of preschool and grades I–III, but their competencies, which fit into the broad pedeutological discourse. The program, which was implemented in the unified master's degree program, was carried out only with the 2018–2023 class since the following classes were already subject to new educational standards.

Competence is an interdisciplinary category. The term "competence" is derived from the Latin word *competentia*, which means "appropriateness", "conformity" (Kopaliński, 2000). Etymologically, competence is "the scope of a person's authority to carry out certain activities, resulting from the »suitability« of a person's knowledge, skills and other qualities" (Jeruszka, 2016, p. 15). Competence is

also defined as "a set of knowledge, skills and experience necessary for the future, which manifests itself in actions" (Katane et al., 2006, p. 44).

Based on the analysis of the literature, we adopt, a broad understanding of the concept of *competence*, which includes, among other things: knowledge, skills, attitudes, experience, abilities, ambitions, professed values, styles of action, personality traits, designing and shaping one's own development, the ability to learn, which are necessary to perform activities in the workplace and "autonomous and responsible participation in social and professional life" (Sławiński, 2013, p. 50). Competencies are acquired and developed throughout life as part of the learning process, in specific situations, typical of the diverse environments in which an individual's socialization takes place (Szempruch, 2003). One of these environments is educational institutions and universities, where competencies that are recognized as professional qualifications are formed as part of formal education, giving entitlement to work and perform activities in accordance with employer expectations. Competencies are also developed within the framework of non-formal education (various forms of further training) and informal education, during the performance of professional work and human relations (Kwiatkowski, 2018).

Professional competence, on the other hand, is defined as the ability to perform a set of professional activities, in a manner consistent with the standards and requirements for a given professional task and job, supported by appropriate skills, knowledge and psychophysical characteristics, also confirmed by qualifications (Szempruch, 2003; Szydlik-Leszczyńska, 2009). There is a kind of unity and harmony between knowledge, skills, understanding and desire, motivation and valuation (Czerepaniak-Walczak, 1997; Pankowska, 2017). De Tchorzewski pointed out that the teaching profession requires not only a process of education, but professional formation, which "includes its internal focus on consciously accepted and goodwill-motivated tasks that it should undertake in order to achieve continuous and systematic professional development" (de Tchorzewski, 2017, p. 9).

In connection with social and economic changes, more and more attention is paid to the need to develop soft competencies, which complement functional, specialized, technical competencies, or otherwise hard, concrete, executive competencies. Soft competencies include self-presentation, building relationships with others, readiness to learn, emotional intelligence, communicativeness, personal culture, networking, teamwork, self-confidence, self-reliance, decision-making, etc. (Szulc, 2019). In addition to the above-mentioned competencies, attention should also be paid to social competencies, which are important in the work of a teacher (Olechowska et al., 2024).

Research indicates that social competence correlates with emotional intelligence, understood as "a set of abilities that enable the use of emotional processes to deal effectively with social situations" (Strelau, 2002, p. 551; Madalińska-Michalak and Góralska, 2012). Jeruszka, referring to Matczak and Knopp's (2013) research, writes that:

> people with a high level of emotional intelligence are more socially competent, have stronger tendencies toward cooperative and pro-social behavior and a greater sense of efficacy in helping others, are more socially active, are more likely and willing to use social support and are satisfied with it. (Jeruszka, 2016, p. 74)

Selvi points out that "teachers are responsible for the functioning of the educational system and need strong and effective competencies, which should be redefined in the context of human lifelong learning" (Selvi, 2010, pp. 167–168). According to her, teachers' professional competencies should include subject matter, research, curriculum, lifelong learning, socio-cultural, emotional, communication, information and communication technology (ICT) and environmental competencies (Selvi, 2010). She also stresses that today the teacher is more of a facilitator, who is supposed to enable students to interact with the content, rather than just impart it. Thus, subject matter competence should be considered in the context of a lifelong learning process, which consists of the ability to learn and responsibility for one's own professional development.

The reform of higher education and especially of teacher education majors in recent years has introduced significant changes aimed at improving the quality of professional preparation, adapting the content and learning outcomes to the requirements of the current times and acquiring the necessary teaching competencies and qualifications (Surma, 2021). As of 2019, a system of single master's degree programs is in effect in accordance with the Law of July 20, 2018 – Law on Higher Education and Science (Journal of Laws 2018, item 1668) and the Decree of the Minister of Science and Higher Education of July 25, 2019 on the standard of education preparing for the teaching profession (Journal of Laws 2019, item 1450).

The changes introduced were preceded by research and the development of the document *Proposal for a Model of Preschool and Primary School Education Teacher Training* (Team at the Ministry of Education, 2018), which proposes a 5-year training cycle. The graduate, graduating from the program, is expected to be: a reflective practitioner (didactic and educational competencies), an expert in supporting child development (psychological and pedagogical competencies), erudite (substantive competencies), a compassionate caregiver (diagnostic competencies), a team member (communicative and emotional-social competencies), a person positively disposed to new experiences (media competencies), a person aware of his interests, a person of integrity (self-education competencies). The educational program emphasizes the combination of individual modules with learning in action, so students were expected to participate in classes in kindergartens and schools as early as the first year of study, which was expected to bridge the gap in the acquisition of professional competencies between full-time and part-time graduates (Szempruch, 2003). In order to raise the level of education, the number of internship hours was also increased (by 60 hours), in addition, 20 hours of individual classes on personalizing the teacher education process with elements of

tutoring were introduced. 3,590 hours were planned for the implementation of the entire model program. Experiences from tests carried out as part of NCBiR-funded projects contributed to the formulation of the current standards for teacher education, in which the number of hours for the implementation of the study program was reduced to 2,800 hours (Journal of Laws 2019, item 1450).

In 2018 (or a year later), many Polish universities began to educate students, implementing their own programs, which were developed on the basis of the above-described document Also, the Ignatianum Academy in Cracow (now the Ignatianum University in Cracow) joined the project, which began in the 2018/2019 academic year. At the same time, part-time studies continued with a second-degree master's degree with the option of choosing a specialization in preschool and primary school pedagogy. Throughout the teacher education process, studies were conducted to monitor the effectiveness of the teacher education program being introduced (Surma, 2019). In addition, in 2023, a comparative study was conducted on the professional (teaching) competencies of fifth-year full-time female students pursuing a program based on the *Proposal for a Model of Preschool and Primary School Education Teacher Training* and second-year, part-time master's students. This was the last year of the two-degree program, which created a unique opportunity to study teacher competencies acquired during different forms of education and to verify two programs based on different educational standards.

RESEARCH AIM AND QUESTION

The aim of the study was to compare the self-assessment of professional competence of those preparing to become preschool and primary school education teachers under different forms of study. The main problem was formulated in the form of a question: what is the difference in the assessment of own professional competence of female students of second year of part-time second degree program and fifth year of full-time single master's degree program? In addition, in order to detail the main problem, the following problem questions were identified:

What is the difference in terms of:

- emotional intelligence,
- social competence,
- assessing their own teaching competence between the groups studied?

RESEARCH METHOD AND SAMPLE CHARACTERISTICS

The research used a data collection method (survey and testing methods) and a quantitative data analysis method (statistical analysis).

The tools used to collect the data were:

- **a survey questionnaire** aimed at collecting descriptive data of the people surveyed, such as age, work experience and length of service,
- **Popular Questionnaire of Emotional Intelligence** (PKIE) by Jaworowska and Matczak (2005). The PKIE consists of 94 items formulated in the form of a statement (e.g. *I often cannot describe what I am feeling*). The respondent is asked to indicate on a five-point scale the degree to which he or she agrees with the statement. The responses obtained provide the basis for calculating the overall score and the scores on the four scales,
- Matczak and Martowska's (2013) **PROKOS questionnaire**, which measures social competence. The PROKOS tool consists of 90 items, each of which specifies different activities or tasks. The activities relate to three areas of human social activity: work, social life and family life (e.g. *At a social gathering, initiate a conversation with a person you don't know*). The respondent is supposed to assess, using a four-point scale, how well he or she would do in a specific situation. The respondent is given an overall score and scores on five scales,
- **Survey questionnaire: Self-Assessment of Teaching Competencies**, consisting of 20 statements (e.g. *I can plan activities with children according to methodological requirements*), which the respondent assesses in a four-point scale. The tool examines substantive, psychological-pedagogical, didactic-methodical, communication-media and self-educational competencies, which refer to the classification of teacher competencies in Strykowski et al.'s (2003) study.

Statistical analysis was used as part of the methods for analyzing the collected data. Comparisons of the values of qualitative variables within groups were made using the chi-square test (with Yates correction for 2×2 tables) or Fisher's exact test where low expected counts appeared in the tables. Comparisons between quantitative variables in the two groups were made using the Mann–Whitney test. The analysis assumed a significance level of 0.05. So, all p-values below 0.05 were interpreted as indicating significant relationships. The analysis was performed in R software, version 4.3.1 (Core Team, 2023).

Fifty-seven participants took part in the study, 22 of whom were students in the second year of part-time second-year studies in Pedagogy (specialization of preschool and primary school pedagogy) (group one, abbreviated in the descriptions of the results as G1) and 35 students in the fifth year of full-time uniform master's studies in preschool and primary school pedagogy, pursuing an experimental training program (group two, abbreviated in the descriptions of the results as G2).

The study participants were aged between 23 and 48 years. The mean age in the first group was 29.41 (range 23 to 48 years), and in the second group was 24.11

(range 23 to 30 years). Participants in group one were significantly older than those in group two ($p < 0.001$).

In group one, 18 (out of 22) had experience working with children in a preschool or school: 15 indicated that they worked as a teacher/educator, and 3 as a teacher's assistant. In group two, 13 (out of 35) had worked in a preschool or school, but mostly as a teacher's assistant (11 people), 2 of them were employed as a teacher/educator. Participants in group one were significantly more likely to have experience working in a preschool or school than those in group two ($p = 0.002$). The students in group one was also significantly older than those in group two ($p = 0.02$).

The selection of research groups was purposive and included 66% of female students graduating from part-time studies and 85% of female full-time students from the 2018–2023 classes.

STATISTICAL DATA ANALYSIS PROCEDURE

The survey was conducted in June 2023 after the completion of the training cycle. Questionnaires were made available to all female participants preparing to work as a preschool and primary school teacher. 79% of female students in the field of pedagogy and 83% in the field of preschool and primary school education participated in the study.

The participants were personally asked to fill out prepared questionnaires. Participation in the study was voluntary and anonymous. The study was conducted in compliance with all national and international ethical standards. The study received approval from the University Committee on Research Ethics of Ignatianum University in Cracow (approval dated 5.05.2023).

RESULTS

Emotional intelligence

The PKIE survey diagnoses four dimensions of emotional intelligence: accepting, expressing and using one's own emotions in action (AKC Scale); empathy, that is, understanding and recognizing other people's emotions (EMP Scale); control, including cognitive control, over one's own emotions (KON Scale); and understanding and becoming aware of one's own emotions (ROZ Scale). The results of the PKIE are shown in Table 1.

Table 1.
Comparison of emotional intelligence (PKIE) scores in both groups

PKIE	Group	*N*	Average	*SD*	Median	Min	Max	Q1	Q3	*p*
AKC	G1	22	56.41	9.90	58.0	35	72	51.25	64.75	$p = 0.176$
	G2	35	53.69	8.07	54.0	36	72	48.00	59.00	
EMP	G1	22	70.09	11.93	70.5	38	89	66.50	73.75	$p = 0.282$
	G2	35	72.86	8.36	73.0	46	89	68.50	78.50	
KON	G1	22	32.41	10.20	33.0	17	50	25.25	40.00	$p = 0.582$
	G2	35	34.31	5.29	34.0	24	44	31.00	39.00	
ROZ	G1	22	32.91	7.24	33.5	20	43	28.00	39.75	$p = 0.38$
	G2	35	31.57	5.39	30.0	23	40	27.00	36.50	
PKIE total score	G1	22	340.50	44.07	347.0	256	411	316.25	372.75	$p = 0.825$
	G2	35	344.89	33.18	348.0	262	401	324.50	366.50	

p – Mann–Whitney test, *SD* – standard deviation, Q1 – lower quartile, Q3 – upper quartile

Source: Authors' own study.

A comparison of the results obtained by the subjects in the two groups shows that there were no statistically significant differences between them: both within the individual PKIE scales and in the total score. It is noteworthy that there is a greater spread in the results obtained by female students in group one in three of the four scales and in the total score, which may suggest greater within-group variation in emotional intelligence in this group. However, this trope requires further statistical analysis, not included in this study.

Social competencies

The PROKOS Questionnaire, which consists of four scales measuring assertive (Scale A), cooperative (Scale K), social (Scale T), social resourcefulness (Scale Z) and social competence (Scale S), was used to examine social competence. The PROKOS results are presented in Table 2.

Similarly, as in the case of emotional intelligence, a comparison of the results obtained by the participants in the two groups in terms of social competence shows that there were no statistically significant differences between them: both within the individual PROKOS scales and in the total scores. In this case, however, a different tendency was observed, namely, a greater spread of results obtained by female students from the second group, which may suggest greater intra-group variation in social competence in this group. Again, however, this clue would require further statistical analysis.

Table 2.
Comparison of social competence scores (PROKOS) in both groups

PROKOS	Group	*N*	Average	*SD*	Median	Min	Max	Q1	Q3	*p*
A scale	G1	22	35.64	4.98	36.5	20	45	32.75	39.00	$p = 0.264$
	G2	35	34.63	5.39	34.0	19	45	32.00	38.00	
K scale	G1	22	51.14	5.66	52.0	37	59	49.00	55.50	$p = 0.469$
	G2	35	52.20	6.07	53.0	35	61	49.00	57.00	
T scale	G1	22	31.86	4.91	33.0	20	40	29.50	34.75	$p = 0.412$
	G2	35	30.46	6.25	31.0	17	41	26.50	35.00	
Z scale	G1	22	39.86	4.40	39.5	28	48	37.25	43.00	$p = 0.267$
	G2	35	38.23	5.65	38.0	26	49	35.00	43.00	
S scale	G1	22	16.41	3.23	16.5	9	23	14.25	18.75	$p = 0.266$
	G2	35	15.40	3.31	16.0	7	21	14.00	17.50	
PROKOS total score	G1	22	174.91	18.16	175.5	132	203	167.75	188.00	$p = 0.476$
	G2	35	170.91	22.70	173.0	107	213	158.50	187.00	

p – Mann–Whitney test, *SD* – standard deviation, Q1 – lower quartile, Q3 – upper quartile

Source: Authors' own study.

Self-assessment of teacher competence

An original questionnaire was used to examine students' self-assessment of their teaching competencies in various areas of competence necessary for the teaching profession. The results are shown in Table 3.

Table 3.
Comparison of self-assessment of teaching competence in both groups – total score

Group	*N*	Total self-assessment of teaching competence							*p*
		Average	*SD*	Median	Min	Max	Q1	Q3	
G1	22	69.09	10.06	72.5	41	80	62	75.0	$p = 0.948$
G2	35	70.17	6.59	72.0	56	80	65	75.5	

p – Mann–Whitney test, *SD* – standard deviation, Q1 – lower quartile, Q3 – upper quartile

Source: Authors' own study.

A comparison of the results obtained by the respondents from both groups did not indicate the existence of a statistically significant difference between them. It is worth noting that in both groups the estimates were at a very high level indicating a high self-assessment of one's own teaching competence.

Further analysis was used to compare the self-assessment of teachers' competencies in specific areas of competence: substantive, psychological-pedagogical, didactic-methodical, communication-media and self-education. This comparison is shown in Table 4.

Table 4.
Comparison of self-assessment of teaching competence in both groups

Self-assessment of teacher competence	Group	*N*	Average	*SD*	Median	Min	Max	Q1	Q3	*p*
Substantive competence										
I know what the process of integrated teaching is all about G2	G1	22	3.59	0.85	4	1	4	4.00	4.0	*p* = 0.224
	G2	35	3.86	0.43	4	2	4	4.00	4.0	
I have enough subject knowledge to teach mathematics G2	G1	22	2.55	1.01	3	1	4	2.00	3.0	p = 0.034*
	G2	35	3.11	0.72	3	2	4	3.00	4.0	
I have enough subject knowledge to teach science	G1	22	3.09	0.92	3	1	4	3.00	4.0	p = 0.412
	G2	35	2.94	0.84	3	1	4	2.50	3.5	
I have enough subject knowledge to teach Polish	G1	22	3.23	0.87	3	1	4	3.00	4.0	p = 0.548
	G2	35	3.43	0.56	3	2	4	3.00	4.0	
Psychological and pedagogical competencies										
I can effectively involve students in the learning process	G1	22	3.32	0.95	4	1	4	3.00	4.0	p = 0.905
	G2	35	3.43	0.70	4	2	4	3.00	4.0	
I can direct children's activities so that they are focused and interested	G1	22	3.50	0.60	4	2	4	3.00	4.0	p = 0.814
	G2	35	3.51	0.66	4	2	4	3.00	4.0	
I have sufficient skills and knowledge to diagnose the learning process of children	G1	22	3.36	0.66	3	2	4	3.00	4.0	p = 0.319
	G2	35	3.17	0.71	3	2	4	3.00	4.0	
In my work with children I am guided by empathy	G1	22	3.77	0.61	4	2	4	4.00	4.0	p = 0.856
	G2	35	3.83	0.38	4	3	4	4.00	4.0	
Teaching and learning competencies										
I can plan activities with children in accordance with methodological requirements	G1	22	3.64	0.73	4	1	4	3.25	4.0	p = 0.535
	G2	35	3.63	0.49	4	3	4	3.00	4.0	
I can plan goals and check if they have been achieved	G1	22	3.50	0.80	4	1	4	3.00	4.0	p = 0.856
	G2	35	3.57	0.50	4	3	4	3.00	4.0	
I know the methods of working with children in preschool	G1	22	3.45	0.80	4	1	4	3.00	4.0	p = 0.114
	G2	35	3.77	0.43	4	3	4	4.00	4.0	
I interpret the teacher's work (I can evaluate his/her good and bad approach to children)	G1	22	3.59	0.85	4	1	4	4.00	4.0	p = 0.474
	G2	35	3.63	0.49	4	3	4	3.00	4.0	
Communication and media competence										
I can cooperate with teachers	G1	22	3.64	0.58	4	2	4	3.00	4.0	p = 0.897
	G2	35	3.63	0.55	4	2	4	3.00	4.0	
I am prepared to work with parents	G1	22	3.45	0.80	4	1	4	3.00	4.0	p = 0.003*
	G2	35	2.86	0.77	3	1	4	2.00	3.0	
I don't have a problem with networking with others	G1	22	3.64	0.79	4	1	4	4.00	4.0	p = 0.317
	G2	35	3.51	0.70	4	2	4	3.00	4.0	
I have no problems with interpersonal communication	G1	22	3.82	0.39	4	3	4	4.00	4.0	p = 0.125
	G2	35	3.60	0.55	4	2	4	3.00	4.0	
I have no problems using information technology to conduct activities with children	G1	22	3.18	0.96	3	1	4	3.00	4.0	p = 0.164
	G2	35	3.51	0.74	4	1	4	3.00	4.0	
Self-education competencies										
I know that it is necessary to keep improving	G1	22	3.59	0.91	4	1	4	4.00	4.0	p = 0.359
	G2	35	3.86	0.36	4	3	4	4.00	4.0	
I am positive about acquiring new knowledge	G1	22	3.73	0.55	4	2	4	4.00	4.0	p = 0.677
	G2	35	3.69	0.53	4	2	4	3.00	4.0	
I know my strengths and weaknesses	G1	22	3.45	1.01	4	1	4	3.25	4.0	p = 0.86
	G2	35	3.63	0.65	4	2	4	3.00	4.0	

p – Mann-Whitney test, *SD* – standard deviation, Q1 – lower quartile, Q3 – upper quartile
G1 (2nd year, SUM), G2 (5th year).

Source: Authors' own study.

A comparison of the results obtained by the respondents from the two groups revealed the presence of two statistically significant differences between them. The first is related to the assessment of their own subject competence in terms of preparation for teaching mathematics. Respondents from the second group rated their subject knowledge in this area significantly higher ($p = 0.034$). The second difference is related to the assessment of communication and media competence in working with parents. In this case, it was the respondents from group one who significantly higher rated their own preparation in this area ($p = 0.003$).

At the same time, it is worth noting that the self-assessment of preparation for teaching mathematics received in group one the lowest score of all (the only one in this group with an average score below 3 (2.55)). In group two, the average score below 3 was obtained in two questions – the question on working with parents, indicated above (2.86), and the question on preparation for teaching nature (2.94).

On the other hand, the highest score in group one was obtained in the question concerning self-assessment of one's competence in the area of interpersonal communication (3.82). Respondents in group two rated very highly their competence in knowledge of the integrated teaching process (3.86), empathy in working with children (3.83) and awareness of the need for self-improvement (3.86).

DISCUSSION

A study of female students graduating with degrees in pedagogy and preschool and primary school education found no statistically significant differences in emotional intelligence and social competence.

On the other hand, a greater variation in emotional intelligence scores in the group of part-time female students and a greater spread in social competence scores in the group of fifth-year full-time female students were observed. These differences may be the result of a different study context. Female students from part-time studies, statistically older and with more work experience, had more individualized development paths, the common experience for them may have been limited to weekend conventions. Female fifth-year students, on the other hand, were immersed in studying in a deeper way, moreover, they received individualized support throughout their studies as part of the personalization of the learning process. Certainly, the observed different intra-group variation would require further analysis.

The goal of the teacher education process is to obtain the necessary qualifications and professional competencies that will contribute to the proper organization (planning, implementation and evaluation) of their own educational activities and those of their students (Strykowski et al., 2003) in the context of lifelong learning (Selvi, 2010). The results of the study indicate that female graduate stu-

dents similarly evaluate their own professional competencies gained during their studies, both in full-time uniform studies and in part-time second-degree studies (no statistically significant differences). These results are close to the maximum possible score.

In both groups, respondents rated their own competence in teaching science relatively low. Research on attitudes toward STEM education among girls and women indicates that this problem still exists and changes should be made as early as kindergarten and the first grades of elementary school (Zdybel et al., 2020). The belief that studying pedagogy is easy and is an alternative to pursuing a degree in the sciences is still one of the motives for choosing the profession of preschool and primary school teacher, which was also shown in a study conducted by Szempruch (2000). The average obtained in the first group in the assessment *I have enough subject knowledge to teach mathematics* was 2.55, while in the second group it was 3.11 (statistically significant difference $p = 0.034$). It should be noted that female full-time students (G2) followed an educational program with an increased number of hours on teaching mathematics in preschool and school. The aim of the measures taken was to increase competence and to eliminate the deficiencies and negative attitudes of female students towards science, resulting from earlier stages of study. In addition to completing the study program, these students also participated in other forms of further training, which they carried out as part of an international project on STEM education.

Lower average scores in the self-assessment of substantive competence, were also observed for teaching science (no statistically significant difference, but the average in the first group was 3.09, and in the second group – 2.94). This can be explained by the implementation of this subject only remotely, due to the COVID-19 pandemic. The lack of opportunities for practical exercises, the combination of theory and practice in the case of this subject is a significant limitation.

Due to the peculiarity of the teacher's work and the uniqueness of educational situations requiring communicative competence, it can be noted that the overall results obtained in this area, in both groups, did not show statistically significant differences. The only aspect that differentiated the studied groups was cooperation with parents (G1 – 3.45; G2 – 2.86, statistically significant difference $p = 0.003$). The part-time students had more and longer experience working with children, which may have contributed to the fact that they rated their communication competencies in preparation for cooperation with families better, compared to the group of full-time students. Similar results regarding the level of interaction competence, were obtained by Szempruch (2003), indicating that part-time students rated themselves higher than full-time students. One of the reasons for the differences may be the lack of opportunities to form these competencies during internships. As it turns out, even with an increased number of hours to 300 for this group, the difference in self-assessment proved statistically significant ($p = 0.003$). The

internship program and the assumed outcomes are geared towards the acquisition of substantive, psychological-pedagogical or didactic-educational competencies, rather than real participation in the entire child/student educational process.

CONCLUSIONS

Teacher competence is acquired in a long process of general and professional education. Students, entering preschool or school, must be equipped with general, specific knowledge, but most importantly, they should have "the ability (learned, innate) to empathize to make accurate decisions" (Ruszaj and Błażejewski, 2011, p. 234). This is especially true in situations of constantly changing students' educational needs and cultural contexts. Thus, in being a competent teacher, self-educational and psychological-pedagogical competencies, which are related to predispositions for this profession and soft competencies, become more important.

Assuming that emotional intelligence and social competence were developed during the course of study, the two different forms of education yielded similar results in this regard. On the other hand, within the framework of teaching competencies, there were some differences, from which recommendations were made:

- in the process of forming substantive competencies in science subjects, students should be more involved in non-formal further education activities, such as volunteering, study circles, projects, research; so that they have more opportunities to verify theoretical knowledge in real situations, and during simulation classes.
- the internship should take into account the need to develop the competence of working with families especially with full-time students in order to better prepare them for work and compensate for their lack of experience.

The 21st century teacher is supposed to inspire children/students to seek their own path in life, encourage activity, build autonomy and individual responsibility (Bałachowicz and Rowicka, 2013), and this correlates with high self-esteem of one's own competencies (Bochniarz, 2018), which are acquired in various contexts in the process of lifelong learning. Education programs should pay attention to developing self-education competencies, for example, through a personalized learning process with tutoring.

STUDY LIMITATIONS

Given that the groups are small in number, it is not possible to generalize the results of the study or draw conclusions based on them to the entire population

of students preparing to become preschool and primary school teachers. As explained earlier, the size of the groups was due to the small number of students graduating in the field of pedagogy and preschool and primary school education. However, this was an opportunity to conduct a comparative study, since in the situation of the second degree program, this was the final year of this form of training for future teachers. The research was limited to one university, because other universities had other programs, often original, and also most of them started their projects a year later. Therefore, there was no opportunity to conduct research that would provide a basis for comparison.

The study of self-assessment of teacher competence in the author's questionnaire was limited to only 20 items, in comparison with other similar tools aimed at teachers. This decision was made because of the group studied. The addressees were graduate students, not teachers, who have the opportunity to assess more detailed aspects of their own competence in the context of their already acquired experience.

Despite these limitations, the study provided a unique opportunity to compare the competencies of female students preparing for the teaching profession under different programs and forms of study. Monitoring the educational process and making curricular changes is an important task in the context of the new challenges of 21st century education.

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PORÓWNANIE KOMPETENCJI ZAWODOWYCH OSÓB PRZYGOTOWUJĄCYCH SIĘ DO WYKONYWANIA ZAWODU NAUCZYCIELA PRZEDSZKOLA I EDUKACJI WCZESNOSZKOLNEJ W RAMACH RÓŻNYCH FORM STUDIÓW

Wprowadzenie: Reforma szkolnictwa wyższego, a zwłaszcza kierunków nauczycielskich w ostatnich latach wprowadziła istotne zmiany, których celem było podniesienie jakości przygotowania zawodowego i zdobycie niezbędnych kompetencji i kwalifikacji nauczycielskich. W artykule przedstawiono wyniki badań na temat samooceny kompetencji zawodowych, przeprowadzonych wśród studentek jednolitych studiów stacjonarnych i niestacjonarnych studiów drugiego stopnia.

Cel badań: Celem badań było porównanie samooceny kompetencji zawodowych osób przygotowujących się do wykonywania zawodu nauczyciela przedszkola i edukacji wczesnoszkolnej w ramach różnych form studiów.

Metoda badań: W badaniach wykorzystano Popularny Kwestionariusz Inteligencji Emocjonalnej (PKIE), Kwestionariusz PROKOS, kwestionariusz ankiety Samooceny Kompetencji Nauczycielskich oraz autorski kwestionariusz ankiety.
Wyniki: Badania przeprowadzone wśród studentek, kończących studia z pedagogiki i pedagogiki przedszkolnej i wczesnoszkolnej nie wykazały statystycznie istotnych różnic w zakresie inteligencji emocjonalnej i kompetencji społecznych. Statystycznie istotne różnice wystąpiły tylko w dwóch przypadkach w zakresie oceny własnych kompetencji nauczycielskich (współpraca z rodzicami i wiedza zakresu nauczania matematyki).
Wnioski: W celu zmniejszenia różnic w ocenie kompetencji merytorycznych z przedmiotów ścisłych należy bardziej angażować studentów/ki w pozaformalne aktywności dokształcania, a w ramach praktyk uwzględnić konieczność rozwijania kompetencji współpracy z rodziną szczególnie ze studentami studiów stacjonarnych.

Słowa kluczowe: kompetencje, kompetencje nauczycielskie, inteligencja emocjonalna, nauczyciel przedszkola, nauczyciel edukacji wczesnoszkolnej