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Teachers' attitudes towards educating talented students and their predictors

Postawy nauczycieli wobec kształcenia uczniów zdolnych oraz ich predyktory

Abstract: From the perspective of the trajectory of talents development at subsequent stages of education, students require different teachers and different types of support. The positive attitudes of teachers towards educating talented students are the issues that do not change. The purpose of the article is to present the results of studies on teachers' attitudes and to determine their predictors. The Scale of Teachers' Attitudes Towards Educating Gifted Students (STATEGS) questionnaire (N=127) was used in the studies. The largest percentage of respondents showed a pro-ability social attitude (40.9%), while anti-ability and pro-ability methodical attitudes were shown by approximately 30% of respondents each. The gender, social environment and experience in working with talented students turned out to be variables differentiating attitudes. The analysis of latent profiles allowed us to distinguish three groups of teachers: with a dominant anti-ability attitude (11 people), with a dominant methodological attitude (11 people) and the largest group, in which the intensity of the three attitudes was equal (105 people). The analysis did not show any significant relationships between

sociodemographic variables and the distinguished profiles. The studies have theoretical significance in terms of the typology of teachers' attitudes and their predictors, and practical significance – for the area of teacher education.

Keywords: education of abilities, teachers' attitudes, latent profiles, predictors, education of talented students.

Introduction

The education of talented students refers to a group numbering, according to various estimates, from 1% to 30% of the population (Freeman, 2001, p. 11). Such a large discrepancy results from differences in the definition of abilities, principles of identification and selection, and also forms and types of education. Since the end of the 20th century, theory and practice have been dominated by a broad egalitarian definition of abilities and talents, developmental concepts, and socio-cultural models. In most countries, talented students are educated in general education systems, which is consistent with the assumptions of inclusive education (Giza, 2023). Meeting their specific needs (supporting the optimal development of predispositions) takes place in mainstream schools and is within the competences and responsibilities of typical teachers. The beliefs about the significant role of teachers in the development of skills (e.g. Subotnik, Olszewski-Kubilius and Worrell, 2015) are accompanied by a lack of clarity in explaining which features determine work effectiveness (Dolata, 2014; Hanushek and Rivkin, 2003).

There are several approaches to getting to know the specifics of good teachers of talented students. Firstly, these are studies focused on their individual characteristics, primarily knowledge and personality (Khalil and Accariya, 2016). The second approach is based on learning about teachers from the perspective of statements (biographies) of talented people (Bloom, 1985). The third approach is the study of teachers' attitudes towards educating talented students. Attitudes have been the subject of studies concerning abilities by educators for over 70 years (McCoach and Siegle, 2007, p. 247). The interest in attitudes results from the fact that the reasons for people's behaviour – even the partial ones – are searched for. Such a cognitive perspective was adopted by the authors of the article.

Teachers' attitudes help to understand relationships with talented students and explain the work undertaken to develop their abilities (Bégin and Gagné, 1994a). It is important to first learn about and understand attitudes and only then to implement effective training programmes. Building awareness of the special needs of talented students and shaping appropriate

attitudes is the first step towards providing high-quality conditions for talents development (Subotnik, Olszewski-Kubilius and Worrell, 2011).

Assumptions of the own studies

Until recently, two attitude scales developed in the 1980s by Françoys Gagné and his colleagues were used in empirical studies: Opinions towards Gifted Education (OGE) and Attitudes toward Gifted Education (ATGE) (Gagné, 2018). The questionnaires were very popular and were translated into several languages. No studies using these scales were conducted in Poland. In 2018, Gagné published an article *Attitudes toward gifted education: Retrospective and prospective update*, in which he conducted a critical analysis of both tools. The author indicated the need to withdraw OGE and ATGE from use due to low psychometric control results (especially for measuring general attitude), inadequacy in relation to new theories and changes in school practices, and due to the lack of studies on representative samples.

Many years of studies in dozens of countries around the world have shown that teachers generally have a positive attitude towards recognizing and meeting the needs of talented students, but they have a a negative attitude towards grouping by ability and acceleration strategies. Along with the study of attitudes, the attempts were also made to identify their predictors, which would allow for explaining and understanding which personal characteristics are associated with a positive attitude and commitment to the education of talented students (Bégin and Gagné, 1994a; Bégin and Gagné, 1994b). A comprehensive review of the source literature was conducted (35 studies from the 1970s and 1980s; about 50 variables) and empirical verification of ten most "promising" sociodemographic variables, which were finally reduced to two: socioeconomic status and contact with giftedness (Bégin and Gagné, 1994a). In conclusion of their analyses, Jean Bégin and Françoys Gagné stated that the most favourable attitude towards the education of gifted students was presented by a well-educated teacher with a high income, childless or with one or two children (1994b, p. 82). The average attitude measurement of teachers and parents was 3.4 (on a 1-5 scale) and the results ranged from 1.9 (a very negative attitude) to 4.6 (a very positive attitude) (Bégin and Gagné, 1994b, p. 78). The results of one of the latest studies using OGE conducted in Slovenia by Mojca Juriševič and Urška Žerak (2019) indicate that teachers have generally neutral or positive attitudes towards gifted students. And these attitudes are more positive than the attitudes of parents and students. The authors explain the differences by the level of knowledge and experience in contact with talented people, assuming that these features shape awareness

of the special needs of talented students, the importance of specific educational support and that they free them from stereotypes.

There are few reports in the source literature on new directions of studies on teachers' attitudes towards educating talented students. The results of the study conducted by Jae Yup Jung and Jihyun Lee (2024) among 339 teachers employed in religious schools in Australia are cognitively promising. The innovativeness of this study results from the fact that the authors used a three-factor definition of attitudes, departing from the previous model of examining attitudes towards various components/segments of education. Based on factor analysis and latent profile analysis, four separate profiles of teachers' attitudes were identified. Nearly one quarter of the respondents have attitudes that are strongly supportive of talented students, slightly over half have moderate attitudes, almost one quarter have labile attitudes and 4% have strongly negative attitudes. It was found that the two key predictors of these profiles were: (a) the school's administrative support for talented students and their education and (b) knowledge about giftedness. Small differences between the sexes were also noted: women are more favourable towards educating talented students than men. When considering the categories of subjects taught, teachers of STEM subjects stand out favourably (Jung and Lee, 2024).

Another new approach are cross-cultural comparative studies, in which types of attitudes and variables explaining them at the level of both individual characteristics and cultural characteristics were searched for (six countries of Central and Eastern Europe: Belarus, Bulgaria, Poland, Romania, Slovakia, Ukraine; N=630; Giza, 2022). For the purposes of these studies, the Scale of Teachers' Attitudes Toward Educating Gifted Students (STATEGS) was constructed and validated. No significant differences were noted in teachers' attitudes due to individual characteristics: gender, level of education, professional specialization, experience in working with talented students and seniority. The country of origin was the only variable significantly differentiating teachers (Giza, 2022).

According to the reports from other studies, teachers working with talented students are older than average teachers and have more than average work experience (Giza, 2016; Tirri, 2008a). This means that interest in working with talented people comes with experience. Kirsi Tirri believes that what distinguishes teachers of talented students is their knowledge of the abilities and special needs of these students (2008b). Differences in attitudes towards talented students have also been noted between teachers of different subjects (Giza, 2016).

The above outlined state of studies and knowledge about teachers' attitudes towards educating gifted students justifies the need for further exploration of this area. For this purpose, our own research was designed and conducted.

Problems, method and studies sample

The subject of the study was to diagnose the attitudes of primary school teachers towards the education of talented pupils/students and their predictors. Teachers' attitudes are the attitudes based on knowledge/beliefs, evaluative and assessing dispositions and expressed in actions taken in the broadly understood area of talented student education (or tendency to act).

The following study questions were formulated:

- What attitudes do primary school teachers adopt towards the education of talented pupils/students?
- Is there any differentiation of teachers' attitudes due to: social environment, gender, seniority, professional specialization, level of teaching, experience in working with talented pupils/students?
- What groups of surveyed teachers similar in terms of types of attitudes are revealed as a result of the analysis of latent profiles? What sociodemographic variables differentiate the affiliation to profiles?

The study of attitudes and their predictors was conducted using the STATEGS questionnaire. The scale has correct psychometric characteristics. It is a Likert-type scale consisting of 33 items. The tool allows for the identification of three types of attitudes: the one expressing a negative attitude towards educating the talented students (anti-ability attitude, PA) and the two positive ones (pro-ability social attitude - PPS, and pro-ability methodical attitude - PPM). These attitudes include cognitive, emotional (except PPM) and behavioural components (Giza 2022). The anti-ability attitude in the cognitive aspect is based on stereotypes (*Talented students are usually not very creative*), in the behavioural aspect it expresses little involvement in working with talented people (*Supporting talented students is rarely undertaken by teachers in my professional environment*), and in the affective-evaluative dimension it is dominated by the belief that supporting abilities at school is socially unjust and should be a private matter of students and their families. The pro-ability, social attitude in the affective-evaluative sphere is based on the opinion about the significant social role of talented people and the need to support them, in the cognitive aspect it emphasizes the role of family, competitive motivation and perfectionism, and in the behavioural aspect it

emphasizes the belief in the development possibilities of talented students at school. Teachers who are dominated by the pro-ability methodical attitude approach the education of talented students in a procedural way, i.e. they highly evaluate the existing support for talented students and their knowledge and competences in this area, they focus on behavioural/methodical aspects, but they do not directly express the assessments or values attributed to abilities and to talented students.

In the presented study, the following variables were controlled: gender, seniority, level of education, experience in working with talented children, professional specialization and type of environment. It was assumed, as a new type of variable, that the location of the school may be a feature differentiating teachers' attitudes. Due to territorial and demographic-economic features, a large city, a small town and a village were distinguished. A city and a village are "the most typical areas of living space, where very different cultures, customs, systems of social relations and upbringing styles are shaped" (Pilch, 2007, p. 418). The division of cities into the large ones (over 50 thousand) and the small ones (below 50 thousand) resulted from studies proving the different opportunities for students' development created by the infrastructure available in both types of cities. The highest level of support for the development of talents is characteristic of small towns, followed by large cities and villages. Small towns and villages differ statistically significantly (Giza, 2006).

A purposive sampling approach was used. The study involved teachers Radom, Skarżysko-Kamienna and villages located between these cities, representing nine public primary schools typical in terms of technical conditions, student achievements and teaching staff. The survey was conducted in a paper form with the support of school principals. 127 completed sheets were collected.

Data analysis methods

Statistical analysis of data was performed in IBM SPSS Statistics 29.0 and jamovi 2.4.11. Basic descriptive statistics were developed for teachers' attitudes, and compliance with the normal distribution was checked using the Kolmogorov-Smirnov test. Reliability of scales was calculated using the Cronbach's alpha internal consistency coefficient. In order to compare two groups in terms of attitudes, the Mann-Whitney *U* test was performed, and when there were more compared groups - the Kruskal-Wallis *H* test. The Dunn test with the Bonferroni correction for multiple comparisons was used as a post hoc test. The significance level was set at $\alpha = 0.05$. In the last

part, latent profile analysis (LPA) was performed, which allows for the identification of hidden subgroups (profiles) based on attitudes. The model was selected based on the BIC value, which is recommended for latent models and the entropy value. Entropy ranges from 0 to 1, where the higher the score, the better the classification made by the model. It is assumed that values ≥ 0.8 indicate good classification (values ≥ 0.6 are considered acceptable; Asparouhov and Muthén, 2014).

Characteristics of attitudes

Table 1. presents the percentage distribution of dominant attitudes among the studied group of teachers.

The analysis showed that the largest percentage of respondents demonstrated a pro-ability social attitude (40.9%). The proportions of respondents with a dominant anti-ability and pro-ability methodological attitude were similar – approx. 30%.

Table 1. Frequency analysis of the dominant attitude of teachers towards the education of talented students

Attitude	N	%
Anti-ability attitude	37	29.1
Social pro-ability attitude	52	40.9
Methodical pro-ability attitude	38	29.9

Descriptive statistics

Table 2 presents basic measures of descriptive statistics along with the Kolmogorov-Smirnov test and the reliability coefficient. The analysis showed that none of the analysed attitudes adopted a distribution consistent with the normal distribution (p values for the Kolmogorov-Smirnov test < 0.05). In the case of the anti-ability attitude, the skewness value exceeded the absolute value of 1, which indicates a significant deviation of the results from the normal distribution.

Reliability measured using Cronbach's alpha showed a satisfactory level for the anti-ability and pro-ability social attitudes. For the pro-ability methodological attitude, reliability was very low, below the acceptable threshold. This means low consistency of the respondents' answers. For this variable, the results are given for guidance only.

Table 2. Descriptive statistics with the Kolmogorov-Smirnov test and reliability analysis

	M	Me	SD	Sk.	Kurt.	Min.	Max.	D	p	Cronbach`s alfa
Anti-ability attitude	30.12	29.00	8.38	1.25	1.88	17.00	59.00	0.14	<0.001	0.810
Social pro-ability attitude	49.01	50.00	6.21	-0.88	1.43	29.00	62.00	0.12	<0.001	0.697
Methodological pro-ability attitude	22.10	22.00	3.38	0.19	0.84	13.00	34.00	0.10	0.002	0.225

Gender and attitudes

Table 3 presents the results of the comparative analysis of women and men in terms of attitudes. The analysis showed that the men studied showed a significantly higher intensity of the anti-ability attitude than the women studied (weak effect). For the remaining attitudes, the differences between the groups turned out to be insignificant.

Table 3. Comparison of the intensity of teachers' attitudes towards the education of talented students depending on gender

	Men (n = 12)			Women (n = 115)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Z	p	r
Anti-ability attitude	84.54	33.00	19.00	61.86	28.00	9.00	-2.04	0.042	0.18
Social pro-ability attitude	53.21	47.00	14.75	65.13	50.00	7.00	-1.07	0.285	0.09
Methodological pro-ability attitude	51.46	22.00	3.75	65.31	22.00	4.00	-1.25	0.212	0.11

Social environment and attitudes

Using the Kruskal-Wallis *H* test, the intensity of teachers' attitudes was compared depending on the social environment. Significant differences were found between the groups for the pro-ability social attitude (Table 4).

Table 4. Comparison of the intensity of teachers' attitudes towards the education of gifted students depending on the social environment

	Village (n = 32)			Small town (n = 23)			Big city (n = 72)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Average rank	Mdn	IQR	H(2)	p	η^2
Anti-ability attitude	75.27	32.00	8.75	58.07	28.00	6.00	60.89	28.00	10.75	4.13	0.127	0.02
Social pro-ability attitude	53.59	48.50	6.00	78.35	52.00	4.00	64.04	50.50	7.00	6.08	0.048	0.03
Methodological pro-ability attitude	61.53	22.00	3.75	66.48	22.00	4.00	64.31	22.00	4.75	0.26	0.880	<0.01

Post hoc analysis showed significant differences between groups for the pro-ability social attitude. It was shown that people living in small towns showed a higher intensity of this attitude than those living in the city ($p = 0.041$). No differences were noted between the remaining groups ($p > 0.05$).

Length of work experience and attitudes

Table 5 presents the results of the comparative analysis of the intensity of attitudes depending on the length of service. No statistically significant differences were found between the groups.

Table 5. Comparison of the intensity of teachers' attitudes towards the education of talented students depending on the length of their employment

	Up to 6 years (n = 16)			7-18 y. of work experience (n = 47)			19 or more years of exper. (n = 64)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Average rank	Mdn	IQR	H(2)	p	η^2
Anti-ability attitude	53.69	26.00	9.00	73.68	30.00	13.00	59.47	28.00	7.00	5.51	0.064	0.03
Social pro-ability attitude	72.38	51.50	6.50	54.68	49.00	7.00	68.75	51.00	7.50	4.93	0.085	0.02
Methodological pro-ability attitude	75.50	23.00	3.75	57.38	21.00	4.00	65.98	22.00	4.00	3.31	0.192	0.01

Professional specialization and attitudes

The analysis using the Kruskal-Wallis *H* test did not reveal any differences in the intensity of teachers' attitudes towards the education of talented students based on their professional specialization (Table 6). Teachers

teaching humanities, mathematics and natural sciences, or other subjects demonstrated similar levels of individual attitudes.

Table 6. Comparison of the intensity of teachers' attitudes towards the education of gifted students depending on their professional specialisation

	humanities (n = 54)			mathematics and natural sciences (n = 24)			other (n = 49)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Average rank	Mdn	IQR	H(2)	p	η^2
Anti-ability attitude	60.97	28.00	11.00	68.38	29.00	8.50	65.19	29.00	10.00	0,76	0.684	<0.01
Social pro-ability attitude	64.69	50.00	7.00	67.04	50.50	8.50	61.76	51.00	6,50	0.37	0.832	<0.01
Methodological pro-ability attitude	69.01	23.00	5.00	53.02	21.00	3.00	63.86	22.00	4,00	3.17	0.205	<0.01

Level of education and attitudes

Using the Mann Whitney U test, the intensity of teachers' attitudes was compared depending on the level of education. The analysis did not reveal any differences between the groups (Table 7). Teachers of the elementary grades and senior grades showed a similar level of attitudes towards talented students.

Table 7. Comparison of the intensity of teachers' attitudes towards the education of talented students depending on the level of education

	elementary grades (n = 32)			Senior grades of compulsory school (n = 95)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Z	p	r
Anti-ability attitude	63.31	28.00	10.00	64.23	29.00	10.00	-0.12	0.903	0.01
Social pro-ability attitude	56.84	49.50	7.50	66.41	51.00	7.00	-1.27	0.202	0.11
Methodological pro-ability attitude	70.72	23.00	5.00	61.74	22.00	4.00	-1.20	0.230	0.11

Work experience with talented students and attitudes

Table 8 presents the results of the comparative analysis of teachers' attitudes depending on their experience in working with talented students. Significant differences were found between the groups for the anti-ability attitude (moderate effect).

Table 8. Comparison of the intensity of teachers' attitudes towards educating talented students depending on experience in working with talented students

	low (n = 11)			average (n = 64)			high (n = 52)					
Dependent variable	Average rank	Mdn	IQR	Average rank	Mdn	IQR	Average rank	Mdn	IQR	H(2)	p	η^2
Anti-ability attitude	98.32	39.00	16.00	62.54	28.00	9.75	58.54	27.50	7.00	10.87	0.004	0.07
Social pro-ability attitude	52,95	49,00	11,00	60,39	49,00	6,75	70,78	51,00	5,75	3,39	0,184	0,01
Methodological pro-ability attitude	67.95	22.00	3.00	62.50	21.00	4.00	65.01	22.00	4.00	0.28	0.871	<0.01

Post-hoc analysis showed that people with little experience in working with talented students showed a higher intensity of anti-ability attitude than people with average ($p = 0.008$) or great ($p = 0.003$) experience. The attitude in people with average and great experience was similar ($p = 1.000$).

Profiles of respondents based on teachers' attitudes towards teaching talented students

In this subsection, *latent profile analysis* (LPA) was conducted to determine groups of respondents who were similar in terms of their attitudes towards educating talented students. Table 9 presents a summary of the tested models. As can be seen from the presented data, the most optimal choice was to divide the respondents into 3 groups (the lowest BIC value with the highest entropy value).

Table 9. Goodness-of-fit measures of the tested models

Class	LogLik	BIC	Entropia
2	-518.40	1085.24	0.850
3	-505.51	1078.83	0.858
4	-505.49	1098.18	0.488

The data presented in Table 10 are standardized averages calculated for teachers' attitudes. These data are also presented in Figure 1. A brief description of the distinguished groups of teachers is presented below.

Grade 1. In this grade, the highest intensity was related to the anti-ability attitude, while the lowest – to the pro-ability social attitude. People from this group showed little involvement in working with talented people. They are dominated by stereotypical beliefs based on the injustice of treating talented students differently.

Grade 2. In grade 2, the methodical pro-ability attitude turned out to be dominant. Teachers in this group approach the education of talented students in a procedural way, without an affective-evaluative component. The lowest intensity was noted for the anti-ability attitude.

Grade 3. In this grade, the intensity of individual attitudes was equal – they showed anti-ability attitudes and pro-ability attitudes to a similar extent. This group of teachers constituted the vast majority among the respondents (105 people).

Table 10. Standardized mean ratings of teachers' attitudes, taking into account the distinguished profiles

	Grade 1 (n = 11)		Grade 2 (n = 11)		Grade 3 (n = 105)	
Parameter	M	SE	M	SE	M	SE
Anti-ability attitude	0.60	0.53	0.61	1.20	-0.14	0.13
Social pro-ability attitude	-2.05	0.50	1.18	0.46	0.09	0.13
Methodical pro-ability attitude	-1.37	0.51	1.67	0.69	-0.04	0.12

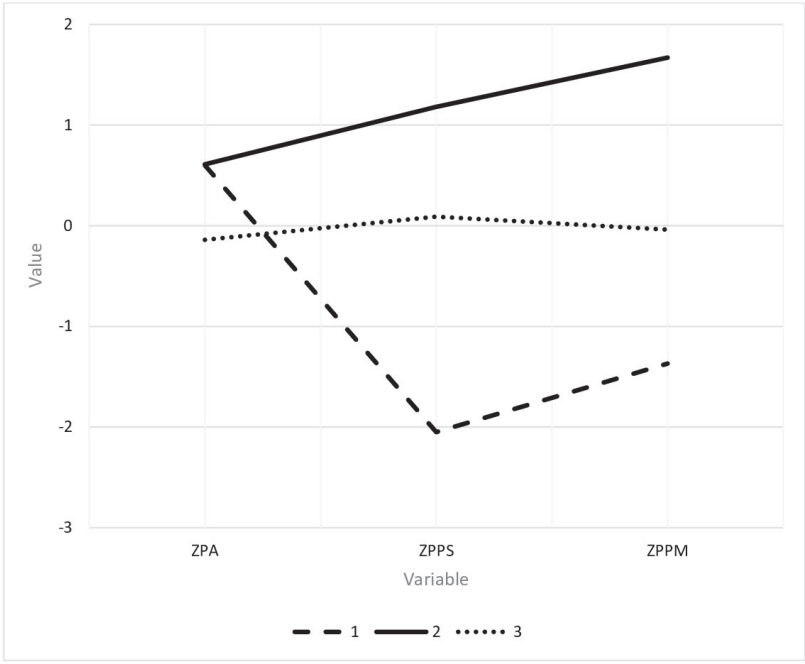

Fig. 1. Standardized means of teachers' attitudes for latent profiles

Annotation. ZPA - Anti-ability attitude; ZPPS - Social pro-ability attitude; ZPPM - Methodical pro-ability attitude

The Fisher-Freeman-Halton exact test was used to check the relationships between sociodemographic variables and the distinguished profiles. The results are presented in Table 11. The analysis did not show any statistically significant relationships between the variables.

Table 11. Frequency analysis with Fisher-Freeman-Halton exact test for the relationship between profile affiliation and sociodemographic variables

Variables	Grade 1		Grade 2		Grade 3				
	n	%	n	%	n	%	Statistics	p	V
Gender									
Men	3	27.3	0	0	9	8.6	4.18	0.089	0.21
Women	8	72.7	11	100.0	96	91.4			
Work experience									
Up to 6 years	0	0	1	9.1	15	14.3	2.75	0.607	0.12
7-18 years	6	54.5	3	27.3	38	36.2			
19 and more years	5	45.5	7	63.6	52	49.5			
Level of learning									
Elementary grades	5	45.5	4	36.4	23	21.9	3.88	0.153	0.17
Senior grades of compulsory school	6	54.5	7	63.6	82	78.1			
Professional specialisation									
Humanities	3	27.3	7	63.6	44	41.9	3.11	0.568	0.12
Mathematics and natural sciences	2	18.2	1	9.1	21	20.0			
Other	6	54.5	3	27.3	40	38.1			
Experience rating									
Low	1	9.1	0	0	10	9.5	2.15	0.697	0.10
Average	7	63.6	7	63.6	50	47.6			
High	3	27.3	4	36.4	45	42.9			
Social environment									
Village	1	9.1	1	9.1	30	28.6	5.66	0.206	0.16
Small town	1	0.1	1	0.1	21	20.0			
Big city	9	81.8	9	81.8	54	51.4			

Summary

Positive attitudes of teachers towards the education of talented pupils/students are fundamental to ensuring that these pupils/students receive support at school that is appropriate to their needs. Even with rich educational resources, a teacher will not use these opportunities because he/she is convinced that educating talented students is pointless, unfair or ineffective. In practice, groups of teachers with different attitudes coexist.

At the first stage of the analyses, the distribution of anti- and pro-ability attitudes in the studied group of teachers was estimated. The pro-ability social attitude, considered to be the most beneficial for development, dominated 40.9% of respondents. Therefore, less than half of teachers adopt a fully positive attitude towards talented students. The proportions of respondents with a dominant anti-ability and pro-ability methodological attitude were similar – approx. 30%. Due to the low coherence of the PPM, it is difficult to generalize about its scope. A high result for PA means that every third student may not receive an appropriate diagnosis and support. Work experience, professional specialization (type of subject taught) and level of education did not affect the differentiation of attitudes. The strongest predictor of attitudes in the reported studies turned out to be experience in working with talented students. The highest intensity of anti-ability attitudes was noted among people with little experience. Slightly smaller, although significant differences were revealed in the anti-ability attitudes of teachers of both sexes. In men, this attitude occurred significantly more often than in women. In the context of all respondents, the group of teachers from small towns stood out positively, demonstrating a higher intensity of pro-ability social attitudes in comparison to the group of respondents from a large city. Approaching generalizations with caution, it may be pointed to an emerging regularity, worthy of further verification: Positive attitudes towards the education of talented students are more often adopted by teachers from small towns, women, and with more than a little experience in contacts with talented students.

At the second stage of statistical calculations, latent profile analysis was performed. It allowed for grouping teachers according to the system of mutual relations between attitudes. Three groups of teachers were distinguished in this way. In none of them was the pro-ability social attitude, assessed as the most beneficial for gifted students, dominant. No group with clearly positive attitudes was identified. However, two small groups were distinguished: with clearly negative attitudes and with moderately positive (behavioural) attitudes. The attitude of most teachers can be described as labile (undecided, variable; the intensity of the three component attitudes was

at a similar level). The assessment of possible relationships between potential predictors and the identified latent profiles led to the conclusion that none of the controlled variables is statistically significant. The population of teachers is heterogeneous, which makes it difficult to search for a uniform picture of attitudes and their typology. The scope of the study does not authorize broad interpretations. However, it certainly has heuristic value, proposing a new perspective on the study of attitudes and locating them in the latest directions of the study on abilities. The study has theoretical significance in terms of the typology of teachers' attitudes and their predictors, and practical significance - for the area of teacher education. Continuing the study, the authors assume control of variables appearing in foreign reports, such as the assessment of support for the education of talented students by the school administration, self-assessment of knowledge about abilities, having a talented person in the family or closest environment, having one's own children, the socioeconomic status of one's own family, motives for working with talented students. Many of the predictors are flexible and can be shaped in the course of education.

The results of the measurement prove that shaping positive attitudes towards the education of talented students is a challenge for the area of teacher education. It is very important that teachers, in addition to theoretical and methodological knowledge, gain positive experience in working with talented students.

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