Original research article / Izvorni znanstveni rad
https://doi.org/10.32903/zs.71.1.3
UDK 37.043:376.1

TEACHERS' ATTITUDES TOWARDS INCLUSIVE EDUCATION MEASURED BY THE MATIES SCALE

Stjepan Jelica

Veleučilište „Lavoslav Ružička" u Vukovaru i Univerza v Novem mestu, Fakulteta za zdravstvene vede

Sandra Bošković

Fakultet zdravstvenih studija u Rijeci i Univerza v Novom Mestu, Fakulteta za zdravstvene vede

Abstract

Inclusive education is a complex concept that involves the interplay of practice, culture, and policy, all of which shape inclusive practices through intricate interrelationships. Teachers, as the promoters of inclusive education, play a crucial role. Attitudes are a complex construct consisting of three components (cognitive, affective, and behavioral). Since attitudes are tendencies that can guide behavior, teachers are more likely to implement inclusive practices if they have positive attitudes. The research aimed to determine the metric characteristics and construct validity of the MATIES multidimensional scale on teachers' attitudes towards inclusive education (IE) and to explore how teachers at primary schools in Croatia evaluate each of the three components of their attitudes towards IE. The study was conducted between May 1 and July 30, 2024, as a cross-sectional study of a probabilistic sample of 478 primary school teachers across Croatia (F = 445, M = 33) via an online questionnaire using the multidimensional MATIES scale. A four-point Likert scale was used, with descriptive indicators and t-tests set at 2.5 for a neutral stance. Confirmatory factor analysis confirmed the construct validity of the MATIES questionnaire. All three subscales showed high internal reliability. Teachers' attitudes were generally positive (M = 2.60), and all three components of the attitude were also positively assessed: the cognitive component (M = 2.60), the affective component (M = 2.96), and the behavioral component (M = 3.23). The behavioral component of attitude accounted for the largest percentage of variance, with 38.65%, followed by the affective component with 12.53% and the cognitive component with 9.65%. The translated and validated MATIES questionnaire exhibits satisfactory psychometric characteristics and is a reliable instrument that can be utilized in further research in its current form. The finding that teachers have positive attitudes toward inclusion should encourage inclusive policymakers to provide additional support to teachers in order to maintain teachers' positive attitudes.

Keywords: *teachers' attitudes, inclusive education, children with developmental disabilities, MATIES questionnaire*

INTRODUCTION

The origin of the idea of inclusive education (IE) lies in the value of every child's right to education, as well as the social-cultural values of equality and fairness, which are fundamental assumptions of social inclusion (Vican & Karamatić-Brčić, 2013). Inclusive education promotes a vision of equal opportunities to get effective educational services, with supplementary aids and support services as needed, to prepare all students for a productive life as full members of society (Čarnická et al., 2023). Inclusive education represents the interplay of practice, culture, and policy that significantly shapes inclusive practices. According to UNESCO's definition, inclusive education aims to identify and eliminate all barriers to education, encompassing everything from curricula to pedagogy and teaching (UNESCO, 2023).

In its Global Education Monitoring Report-Inclusion and Education, UNESCO defines inclusive education as education that promotes mutual respect and value for all individuals and builds educational environments where access to learning, institutional culture, and curriculum reflect the value of diversity (UNESCO, 2020).

Research shows that there are consistent factors contributing to inclusive practices in schools, including teachers' attitudes toward inclusive education, their intention to use inclusive practices, and lower levels of concern when they teach in inclusive classrooms (Wray, Sharma, and Suban, 2002). Many researchers consistently highlight the importance of teachers' attitudes as a key factor in the success of inclusive education (Alshaboul and Ibrahim; Ćwirynkało et al., 2017; Čepić et al., 2015; Desombre, 2018; Hassanein, 2021; Jury et al., 2021; Lamotte & Jury, 2018; Martin, 2018; Mihić-Skočić, Štemberger and Kiswarday, 2017; Vlah, 2017; Vlah & Šokić, 2018; Toye, Wilson and Wardle).

The possibilities of forming positive attitudes among teachers, especially toward students with developmental disabilities, have been studied throughout the period of integration and inclusion implementation in education (Zrilić, 2018). The attitudes of teachers significantly determine the quality of direct work with children with disabilities and the overall atmosphere, which significantly contributes to the social inclusion of children with developmental disabilities (Jurčević-Lozančić, 2015). Teachers' attitudes toward inclusive education are considered the most important obstacles to its successful implementation (Vican, 2013). It is essential to measure teachers' attitudes toward the inclusion of children with special educational needs to identify and address any obstacles to the successful implementation of inclusive education policies (Ewing, Monsen, and Kielblock, 2017). Knowing the attitudes of individuals or a social group allows for the prediction of their behavior (Borić & Tomić, 2012).

Although policies and legislation are necessary, they do not provide enough guidance on how to implement the concept of inclusion, but only a framework for action. Teachers' attitudes can vary depending on the cultural context of the country and other factors. According to Vrcelj (2020), in addition to the primary role of the school in development and education, the school can also be viewed as a socio-historical phenomenon or as a mirror of the politics and culture of a particular country, as well as the school climate and school culture, which, according to the Vrcelj (2020) are not synonymous. In addition, Vrcelj (2020) emphasizes the importance of the role of parents as vital practitioners of education.

From the above, we can state that the concept of school and education is not only defined by the stakeholders who reside at the school (administration, professional services, teachers) but that the concept of school can be broadly defined according to the above-mentioned components. Therefore, a modern school requires better cooperation with all stakeholders. This includes the timely exchange of information, defining the problem and its cause, involving pedagogues and psychologists to provide assistance, and engaging professionals such as educational rehabilitators, clinical psychologists, psychiatrists, doctors, and other experts (Dmitrović, 2011).

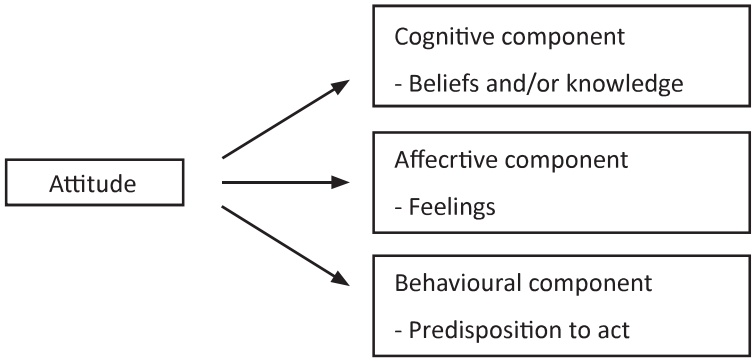
On the one hand, regulations represent a framework for the school's actions as responsible institutions that have duties related to students with developmental disabilities, which can increase pressure on teachers and affect factors influencing teacher attitudes, such as self-efficiency (Sharma & Sokal, 2015), resistance to new situations (Yan, 2019), the imposition of the role of being the solution to every situation in an inclusive classroom (Memišević & Hodžić, 2014), or in terms of concerns about the possible negative effects of including students with developmental disabilities in the regular education system, such as additional burden and obligations, and the possibility of worsening classroom results (Milković-Nikčević, Jurković and Perković, 2017). Over the last thirty years, the number of studies examining teachers' attitudes towards IE has significantly increased. Teachers' attitudes are considered an extremely important factor in the successful implementation of inclusive education.

Attitudes are cognitive and behavioral predispositions/aversions expressed in evaluations of specific people, places, or things. Attitudes are learned, and they influence behavior (Pena-va-Brekalo, 2010). In their book, Hogg and Tindale (2001) present one of the earliest definitions of attitude, given by Cantril in 1934, who defined attitude as "a more or less permanent state of readiness of mental organization which predisposes an individual to react in a characteristic way to any object or situation with which it is related."

Evidence suggests that attitude change leads to behavioral change, but this approach insufficiently considers the nature and operation of habits, which constitute boundary conditions for attitude-based interventions (Verplanken & Orvell, 2022). Integrating research on attitudes and habits could enable researchers to determine when and how behavioral change

strategies will be most effective (Verplanken & Orvell, 2022). The prevailing opinion is that attitudes consist of three components: cognitive (beliefs and knowledge), affective (feelings and emotions), and behavioral-motivational (predisposition to act) (Ćwirynkało & Myśliwczyk, 2016; De Boer, Minnaert, & Pijl, 2011; Nakić, 2014). In their research, Krischler and Pit Ten Kate (2019) also state that attitudes consist of three components: cognitive, affective, and behavioral.

Figure 1. *Three-component model of attitude*



Source: De Boer, A., Minnaert, A., Pijl. S.J. (2011).

According to De Boer, Minnaret, and Pijl (2011), the cognitive component represents beliefs and knowledge, the affective component represents feelings, and the behavioral component represents the predisposition to act.

The dominance of the behavioral component in attitude formation has been unequivocally established in most of the consulted research: Butakor, Ampadu, and Suleiman (2018); Dias and Cadime (2015); Dubayova and Haficova (2024); Rochovska (2022); Van Steen and Wilson (2020). The inferiority of the cognitive component in attitude formation was also established in the research by Dias and Cadime (2015) and in the research by Butakor, Ampadu, and Suleiman (2018) using the MATIES that we have also used in our research.

Attitudes are tendencies that guide behavior, so teachers' positive attitudes towards educational inclusion are considered the foundation for implementing inclusive education (Mihić-Skočić, Gabrić and Bošković, 2016). According to a study by Hogg and Vaughan (2005), an attitude is "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events, or symbols. "Teachers are more likely to have stronger intentions to use inclusive practices if they have positive attitudes towards inclusion (Sharma et al., 2013). However, having certain attitudes and intentions to teach in a certain way does not necessarily mean that teachers feel they have the capability to do so (Sharma et al., 2024).

Nakić (2014) defines attitude according to the so-called ABC model, which represents a three-component model of attitude where attitude can be distinguished into a) affective component, b) behavioral component, and c) cognitive component.

Authors such as Barnova et al. 2022; Butakor et al. 2018; Čarnická et al. 2023; Evil, Monsen, and Kielblock, 2018; Jurca, 2023; Lohman et al. 2016; Mahat 2008;Štemberger and Kiswarday, 2017; Valovič 2015, describe the analysis of the three-component model of attitudes using the multidimensional MATIES scale. Although research studies on teachers' attitudes towards IE are available in the professional and scientific literature in Croatian, the multidimensional MATIES scale for assessing the affective, behavioral, and cognitive components of attitudes has not yet been translated and validated into Croatian. Instead, attitudes have been analyzed unidimensionally using other questionnaires.

Inclusive education was introduced in Croatia in the 1980s and has been regulated since 2008 by the Law on Education in Primary and Secondary Schools. In addition to the Law on Upbringing and Education (Ministry of Science, Education and Youth-MZOS, 2008), the issue of inclusive education in the Republic of Croatia is also regulated by the National Pedagogical Standards for Preschool, Primary and Secondary Education (Agency for Upbringing and Education-AZOO, 2008, Article 2 and Article 4), the Ordinance on Primary and Secondary Education of Students with Disabilities (AZOO, 2015), the Ordinance on Methods, Procedures and Elements for Evaluating Students in Primary and Secondary School (MZOS, 2015), the Ordinance on the Procedure for Determining the Psychophysical Condition of Students, and the Composition of Expert Commissions (MZOS, 2014), and the National Curriculum Framework for Early Childhood Education and Care and General Compulsory and Secondary Education (MZOS, 2017). The aforementioned legal framework has resulted in an increase in the number of students with developmental disabilities who are integrated into regular elementary school classes in Croatia.

According to data from the School e-Database (ŠeR) of the Ministry of Science, Education, and Youth, a total of 1,984 schools were registered in the 2023/2024 school year, including 900 main schools and 1,084 branch schools, all founded by cities, municipalities, counties, or the Republic of Croatia. In the 2023/2024 school year, a total of 302,075 students attended state primary schools, including 27,585 students with disabilities, of whom 27,348 completed the grade (www.mzom.gov.hr, 2025). The number of integrated students is steadily increasing, and data from the 2013/2014 school year shows that 309,224 students were enrolled in mainstream primary education in state primary schools, 18,581 of whom were students with disabilities and 18,551 of whom finished the grade. Compared to recent data from the 2023/2024 school year, this represents an increase of 9,004, or 48.4% (www.mzom.gov.hr, 2025).

The term' children with special educational needs (SEN)' includes both children with developmental disabilities and gifted and talented children (Zrilić, 2018). The subject of our re-

search was teachers' attitudes towards children with developmental disabilities. According to the State Pedagogical Standard (2008), children with developmental disabilities belong to a group of students with a determined degree and type of disability according to social welfare regulations, which includes students with visual or hearing impairment, speech-voice-language communication disorders, and specific learning disabilities, motor disabilities, reduced intellectual abilities, behavioral disorders or autism spectrum disorders, and multiple types and degrees of difficulties in psychophysical development. Such a child may be included in a regular or special primary school institution and attend classes according to a regular, individualized, or special program, depending on the type and degree of disability.

In conclusion, children with developmental disabilities are part of the group of children with special educational needs (SEN).

MULTIDIMENSIONAL SCALE-MATIES

The Multidimensional Attitudes Toward Inclusive Education Scale (MATIES) was developed to efficiently measure the affective, cognitive, and behavioral aspects of attitudes within the field of inclusive education (Mahat, 2008). The MATIES scale comprises three subscales: affective, behavioral, and cognitive. The questions cover three levels: cognitive, affective, and behavioral components, with six consecutive items for each. The cognitive dimension is reflected in an individual's beliefs and knowledge about inclusion, the affective dimension in their expression of emotions and motivation, and the behavioral dimension reflects their readiness to take proactive action in specific situations.

The cognitive component (items 1-6) focuses on general attitudes and perceptions of respondents towards inclusivity, enabling the development of all students regardless of their difficulties, promoting inclusion as a way to encourage socially acceptable behavior, attending special schools for students with difficulties, and adapting curricula and costs associated with inclusive education.

The affective component (items 7-12) explores emotions towards inclusion, including both positive aspects, such as openness and trust, and negative aspects, such as fear and frustration.

The final dimension, the behavioral component (items 13-18), records teachers' individual self-reflection on their readiness to take proactive action in specific situations, such as curriculum adaptation, physical inclusion of students with developmental disabilities, technical modifications of the physical environment, and communication techniques with students.

The MATIES questionnaire (authored initially by Mahat, 2008 and translated into Croatian) met the criteria for reliability, construct validity, and content validity and showed preliminary evidence of its suitability for measuring teachers' attitudes.

Table 1
Cronbach's alpha values of the MATIES questionnaire in studies

	α MATIES Our sample	α MATIES Valovič, 2015	α MATIES Lohmann et al., 2016	α MATIES Štemberger and Kiswarday, 2017	α MATIES Mahat, 2008
Cognitive component	0.82	0.79	0.74	0.79	0.77
Affective component	0.87	0.85	0.73	0.89	0.78
Behavioral component	0.91	0.85	0.83	0.91	0.91

High factor saturations were confirmed later in other studies (Valovič, 2015; Lohmann et al., 2016; Štemberger & Kiswarday, 2017). Furthermore, in our pilot study, to determine the metric characteristics of the questionnaire, we obtained high saturations of particles in all three factors. All already mentioned studies show that the MATIES questionnaire is a valid instrument for measuring the three components of attitudes.

METHODS

Aims and hypotheses

The fact that the number of children with developmental disabilities enrolled in primary school education is increasing year by year underlines the importance of researching this issue. The review of the literature clearly established that teachers' attitudes are crucial for the successful implementation of inclusive education. Therefore, one of the study's aims was to investigate the attitudes of primary school teachers in the Republic of Croatia towards the inclusive education of children with developmental disabilities. Additionally, one of the research goals was to determine which component of attitude (cognitive, affective, or behavioral) explains the largest portion of the attitude variance. Finally, the aim of the research was to examine the metric characteristics of the Croatian version of the maties questionnaire and explore its potential use in future research. In accordance with the research objectives, the following hypotheses were formulated: H1-Most teachers have positive cognitive, affective, and behavioral components of attitudes toward inclusive education, and H2-There are statistically significant differences between the components of teachers' attitudes.

Participants

The study was conducted between May 1 and July 30, 2024, as a cross-sectional study of a probabilistic sample of 478 primary school teachers across Croatia (F = 445, M = 33) via an online questionnaire using the multidimensional MATIES scale. The link to the survey, along with a request for participation in the research, was forwarded to the email addresses of state primary schools in the Republic of Croatia (professional services, principals) after obtaining permission from the Ministry of Science and Education to conduct research in primary schools (Class:602-01/23-01/00144, Reg.No.:533-06-23-0002). A total of 510 respondents (N = 510) were collected. However, of this number, during the statistical data processing process, some questionnaires were discarded due to central tendency bias in the responses in the entire questionnaire (Burić & Orlandini, 2014), and a smaller number of questionnaires were discarded due to the bias of selecting exclusively the left or right side of the Likert scale in the entire questionnaire (Bishop & Herron, 2015). The total number of discarded questionnaires was 38, and the final number of respondents in this study was 478. (N=478). Selection criteria for participation in the study: teachers in state primary schools exclusively from the territory of the Republic of Croatia, teachers in current employment (permanent employment or temporary employment), appropriate education: college VII/1 level, graduate teacher/master of primary education, master of science, doctor of science. Exclusive criteria for participation in the study: teachers in primary schools outside the territory of the Republic of Croatia, teachers in private primary schools in the territory of the Republic of Croatia, teachers who were not employed at the time of the study, central tendency bias or bias in choosing the left or right side of the Likert scale in the entire questionnaire.

Participants were collected from the following regions: Adriatic Croatia, Northern Croatia, City Zagreb, and Pannonian Croatia, in accordance with the classification of statistical regions. The counties of the Republic of Croatia are classified into four statistical regions: Adriatic Croatia, Northern Croatia, the City of Zagreb, and Pannonian Croatia (Official Gazette 125/2019, Article 3).

Participants had been informed that the study was anonymous, that the data would be processed collectively without any links to their names or schools, and that they could withdraw from filling out the questionnaire at any time.

Instruments

To research teachers' attitudes, a MATIES questionnaire with a four-point Likert scale was used, featuring descriptive indicators and t-tests set at 2.5 for a neutral stance. The measurement instrument consists of translated statements of three subscales of the original MATIES questionnaire (6 items for the cognitive subscale, 6 items for the affective subscale, and 6 items for the cognitive subscale). The validation of the Croatian version of the MATIES

questionnaire was carried out using exploratory and confirmatory factor analysis, response ranges, and reliability via Cronbach's alpha coefficient, based on which the measurement characteristics of the instrument were verified, and the three subscales (cognitive, affective, and behavioral) were confirmed in the MATIES questionnaire. The authors have obtained permission from the author of the questionnaire (Assoc. Prof. Mahat). There are no special conditions for using the scale, and it can be used freely (with reference to the author of the scale).

RESULTS

The largest number of participants belongs to the age group between 41-50 years old, and the least number of teachers are over 60 years old. The majority of the sample consists of females (N=445) and males (N=33). The largest number of respondents (N = 343) have more than 10 years of work experience, while the fewest have up to 5 years of work experience. Also, the largest number of participants have more than 10 years of work experience in inclusive classrooms, and only N=22 teachers are without experience in inclusive classrooms. By working experience in an inclusive classroom, we considered that a teacher had included at least one child with disabilities in a regular classroom during one school year.

The largest number of respondents comes from the city of Zagreb (N = 220), followed by those from Pannonian Croatia (N = 130), then from the Adriatic Sea (N = 92), and finally from Northern Croatia (N = 36) (Table 2).

Table 2

Demographic characteristics of participants

	Frequency (f)	**Percentage (%)**
Age		
Up to 30 years	48	10.0
Between 31-40 years	137	28.7
Between 41-50 years	164	34.3
Between 51-60 years	112	23.4
More than 60 years	17	3.6
	Total 478	100.0
Sex		
Female	445	93.1
Male	33	6.9
	Total 478	100.0
Regions of participants		
Adriatic Croatia	92	19.2

	Frequency (f)	Percentage (%)
Northern Croatia	36	7.5
Zagreb	220	46.0
Pannonian Croatia	130	27.2
	Total 478	100.0
Work experience		
Up to 5 years	63	13.2
Between 6-10 years	72	15.1
More than 10 years	343	71.8
	Total 478	100.0
Experience in the inclusive classroom		
Up to 5 years	124	25.9
Between 6-10 years	92	19.3
More than 10 years	240	50.2
Without experience	22	4.6
	Total 478	100.0

Before the main study, a pilot study was first conducted on 200 respondents for the purpose of confirming the metric characteristics of the MATIES questionnaire (confirmatory factor analysis and Cronbach's alpha coefficients), and the results are shown in Tables 3, 4, and 5.

All items exhibited appropriate high factor loadings (>0.4) on the assumed factor (Table 3).

Table 3

Factor loadings of the MATIES for the three-factor solution (with oblimin rotation)

ITEMS	Behavioral scale	Affective scale	Cognitive scale
MATIES BIH 5	0.936		
MATIES BIH 3	0.786		
MATIES BIH 1	0.754		
MATIES BIH 6	0.745		
MATIES BIH 2	0.745		
MATIES BIH 4	0.720		
MATIES AFE 3		0.908	
MATIES AFE 2		0.865	
MATIES AFE 1		0.714	
MATIES AFE 4		0.683	
MATIES AFE 6		0.502	
MATIES AFE 5		0.455	

ITEMS	Behavioral scale	Affective scale	Cognitive scale
MATIES KOG 2			0.747
MATIES KOG 1			-0.692
MATIES KOG 6			0.681
MATIES KOG 3			-0.637
MATIES KOG 5			0.594
MATIES KOG 4			-0.588

Principal component factor analysis identified the existence of three factors. Firstly, the suitability of the matrix for factorization was confirmed. KMO = 0.894 ($p > 0.5$) and Bartlett's test of sphericity $\chi^2 = 2063.09$ ($p < 0.001$) indicated a significant correlation among the questions within the scale, justifying the conduct of factor analysis. Based on the screen test, three factors (eigenvalue < 1) explaining 55.6% of the variance were identified.

All three subscales have satisfactory high internal reliability, with Cronbach's $\alpha = 0.82$ for the Cognitive subscale, Cronbach's $\alpha = 0.87$ for the Affective subscale, and Cronbach's $\alpha = 0.91$ for the Behavioral subscale.

Confirmatory factor analysis confirmed the construct validity of the model, yielding satisfactory model fit indices ($\chi2 = 567.82$, $\chi2$ /df = 4.30, CFI = 0.90, TLI = 0.90, RMSEA = 0.08, SRMR = 0.07) (Table 4).

Table 4

Fitting the three-factor model of the MATIES questionnaire

Model fitting	Tested model (ss=132)	Reference values	
		Good fitting	Acceptable fitting
χ^2	286.62 / 132 = 2.17 ($p < 0.001$)	$p > 0.01$ (n.s.)	χ^2 / ss ≤ 5 (big samples)
CFI	0.98	≥ 0.95	≥ 0.90
TLI	0.98	≥ 0.95	≥ 0.90
RMSEA	0.08	≤ 0.06	≤ 0.08
SRMR	0.08	≤ 0.08	≤ 0.10

In Table 5, response ranges for individual subscales are shown along with descriptive statistics. All subscales display a full range of responses, and the asymmetry indices (Skewness and Kurtosis) are low <2 (remained within +/- 2), and therefore, most of the data did not deviate from the normal distribution (Hair et al., 2022).

Table 5

Descriptive statistics for the three-factor model of the MATIES questionnaire

Subscales	N	Min	Max	M	SD	Skewness	Kurtosis
Cognitive subscale	200	1.00	4.00	2.3733	0.67793	-0.057	-0.478
Affective subscale	200	1.00	4.00	1.9883	0.75642	0.605	-0.312
Behavioral subscale	200	1.00	4.00	3.2517	0.69516	-0.885	0.283

In the teacher attitudes towards inclusive education (Table 6), descriptive indicators with a t-test set at a neutral stance (value 2.5) showed that teachers have a slightly positive cognitive component of their attitude towards inclusive education, a positive behavioral and affective component of their attitude towards inclusive education, and a slightly positive general attitude towards the inclusion of students with disabilities. A stance value of 2.5 is considered neutral; values above 2.5 are considered positive, and values below 2.5 are considered negative.

Table 6

Descriptive indicators of teachers' attitudes towards inclusive education

Attitudes	N	Min	Max	M	SD	t
Cognitive component of attitude toward inclusive education	478	1.00	4.00	2.60	0.671	3.15*
Behavioral component of attitude toward inclusive education	478	1.00	4.00	3.23	0.698	22.91*
Affective component of attitude toward inclusive education	478	1.00	4.00	2.96	0.733	13.72*
General attitude toward inclusive education	478	1.35	3.81	2.60	0.471	0.03

The results of the factor analysis (Table 7) showed that in forming attitudes towards inclusive education, the behavioral component of attitude explains the largest percentage of variance and contributes the most in attitude formation (38.65%), followed by the affective component of attitude (12.53%) and finally, by the cognitive component of attitude (9.65%).

Table 7

Comparison of predictions of different attitude components toward educational inclusion

Particles	Behavioral component	Affective component	Cognitive component
MATIES_KOG_1			0.664
MATIES_KOG_2			0.796
MATIES_KOG_3			0.680
MATIES_KOG_4			0.583

Particles	Behavioral component	Affective component	Cognitive component
MATIES_KOG_5			0.674
MATIES_KOG_6			0.792
MATIES_AFE_1		0.808	
MATIES_AFE_2		0.845	
MATIES_AFE_3		0.853	
MATIES_AFE_4		0.700	
MATIES_AFE_5		0.439	
MATIES_AFE_6		0.584	
MATIES_BIH_1	0.718		
MATIES_BIH_2	0.810		
MATIES_BIH_3	0.846		
MATIES_BIH_4	0.809		
MATIES_BIH_5	0.913		
MATIES_BIH_6	0.750		
Distinctive square root	6 957	2 256	1 737
Percentage of explained variance	38.65%	12.53%	9.65%

Principal component factor analysis detected three factors. All items exhibited appropriate high factor loadings (>0.4) on the assumed factor. Principal component factor analysis detected three factors that explain 60.83% of the variance. The behavioral component explains the largest percentage of variance, 38.65% (predisposition to act), followed by the affective component of the attitude, which explains an additional 12.53% of the variance (feelings, emotions), and finally, the cognitive component, which explains 9.65% of the variance (beliefs and knowledge) from which it can be concluded that teachers' readiness for change contributes the most to the formation of teachers' attitudes towards IE.

DISCUSSION

After verifying the suitability of the Croatian version of the MATIES matrix for factorization, factor analysis has proven the existence of three factors, with all items of individual subscales (affective, cognitive, and behavioral) showing high saturations. High saturations of Cronbach's Alpha confirm internal consistency in the Croatian version of the MATIES questionnaire, which is comparable to the original version of the MATIES questionnaire (Mahat, 2008). We can conclude that the translated validated questionnaire has satisfactory psychometric characteristics and is a reliable instrument that can be used in further research in its current form.

The results of our research suggest that teachers have a generally mildly positive attitude towards inclusive education, and all three attitude components were positively evaluated.

While all components show a positive value, there is no reason for satisfaction, as the general attitude towards IE falls within the zone of neutral attitudes (M = 2.60). Therefore, we can conclude that the first hypothesis is confirmed. This finding correlates with a study by De Boer, Pijl, and Minnaert (2011). The results of research on teachers' attitudes towards inclusive education in Croatia are overwhelmingly consistent in supporting the thesis that teachers have a favorable inclination towards adopting inclusive education practices, and researchers in Croatia generally confirm positive attitudes (Borić & Tomić, 2012; Jurković & Perković, 2019; Karamatić-Brčić, Karamatić and Viljac, 2019; Kranjčec-Mlinarić, Ralić Milković-Nikčević, Vidaković-Flajs, 2023; Žic & Lisak, 2016). Although most teachers in our research have more than ten years of work experience (343 teachers) and 241 teachers have over ten years in an inclusive classroom, the results still show positive attitudes towards the concept of inclusion in the behavioral component and readiness for change, indicating that, overall, the issues in practice have not changed the commitment of teachers to implementing the inclusive education concept. Furthermore, this correlation can also be interpreted in terms of its impact on attitude stability. Additionally, in the context of the cognitive and behavioral components, the attitude-behavior correlation was positively associated with attitude stability (Glasman & Albarracin, 2006).

In addition, when exploring the three-component attitude model, teachers in Croatia also positively assessed the other components of the attitude: the cognitive component (M = 2.60), the affective component (M = 2.96), and the behavioral component (M = 3.23). To the authors' knowledge and based on the literature review, the three-component attitude model has not yet been researched in Croatia, but rather, attitudes have been examined in general. Therefore, our data represent specific research and cannot be compared with similar research in Croatia. Additionally, in forming attitudes towards inclusive education, the behavioral component of the attitude contributes the most, with 38.65% of the explained variance, followed by the affective component with 12.53% and the cognitive component with 9.65%. The results of our research suggest that the components of an attitude do not influence attitude formation to the same degree, implying that attitudes are a complex construct. Therefore, we can conclude that the second hypothesis is confirmed.

In the research (Čarnická et al., 2023; Valovič, 2015; Štemberger & Kiswarday, 2017; Butakor et al., 2018; Lohman et al.), the three components of attitude: cognitive, affective, and behavioral, are also analyzed using the MATIES scale, where the behavioral component explains the largest percentage of variance.

These results of the behavioral component imply that teachers view the concept of inclusive education from the perspective of motivated stakeholders of inclusive education, willing to

adapt their teaching strategies and that inclusive policymakers should be encouraged to provide support to teachers through interventions aimed at strengthening or supporting teachers' inclusive beliefs or behaviors.

When examining attitudes, it is necessary to take into account two important aspects from which the results should be viewed. One is that, according to Lautenbach and Antoniewicz (2018), the attitudes of inexperienced teachers may reflect naive or superficial beliefs due to a lack of experience working in an inclusive classroom, and another is that certain responses may be a reflection of socially desirable responses rather than actual attitudes. Given that the largest number of respondents in our study have more than 10 years of work in inclusive practice, we can say that the results in this segment were obtained from the position of experienced teachers. The second aspect is not possible to verify and is listed in the research limitations section.

Although the values of the cognitive component (enabling development for all students regardless of difficulty, promoting socially acceptable behavior through inclusion, attending special schools for students with difficulties, adapting curricula and costs of inclusive education) obtained in our research tend to be almost neutral, that can be a reflection of unstimulating, unfavorable, and maybe sometimes chaotic conditions for implementing inclusive education. It is possible that teachers, through the cognitive component, reflect more on the issues of implementing the concept of inclusive education rather than the attitude itself. There is a reason to believe in such a claim, especially since teachers have strongly emphasized positive attitudes and, readiness for change and proactive action through behavioral components. Considering that, according to Vrcelj (2020), the school is a mirror of the politics and culture of a country and is made up of the school climate and school culture, it is clear that there are complex interrelationships that can influence both the success of inclusive education and the attitudes of teachers, especially in the domain of the cognitive component through which the problems of an unstimulating environment at school can be most closely reflected. The above also implies that teachers' attitudes cannot be addressed as the sole stakeholders in the success of implementing inclusive education. We can assume that the existence of many moderators that make up the school and can influence teachers' attitudes, such as legal legislation, environment, and support, can create a gap between concept and practice.

Our results related to the affective component of attitude show that categories representing the affective component (irritability and anger, frustration, discomfort related to communication in an inclusive classroom) do not dominate within the affective component, and attitudes related to the affective component are positive. This finding shows that there is consistency between affective (negative feelings do not dominate) and behavioral components (willingness for proactive action and adaptation), adding an extra dimension to the questionnaire consistency. A strong correlation between the affective and behavioral components ($r=0.517$, $p<0.01$) was also found by Štemberger and Kiswarday (2017), showing that they do not experience negative emotions and are willing to make changes and adapt in an inclusive classroom.

All three positive components of attitudes that we detected in our research suggest a good basis for strengthening and improving the inclusive paradigm in primary education, considering the readiness of teachers to change inclusive practice. This can be achieved through school support for teachers (professional services, management), which in a broader context could also be considered as a proactive protection of teachers in the sense that they are not addressed as those who should be the solution to every situation in an inclusive classroom. The support factor is also highlighted in the studies by Milković-Nikčević, Jurković, and Perković (2017) and Saaloviita (2019) in the sense that with greater school support, teachers have more positive attitudes towards methodological and didactic aspects of work, individualization of teaching, and professional development and cooperation. Also, identical to the results of our research, the research by Boyle et al. (2012) clearly emphasizes that it is vital for teachers to feel supported by school management and states that this contributes to the possibility of more efficient work in the classroom. Concerns about the availability of support are also stated in the research by Warnes, Done, and Knowler (2022).

Three-quarters of the participants in our research belong to the age group of up to 50 years old, i.e., teachers who will likely participate in education for a long time, which emphasizes the importance of providing support for maintaining a positive climate towards inclusive education. Although it is clear that teachers' attitudes are important in creating inclusive educational practice, it is clear that the fact that teachers have a certain attitude, opinion, or belief does not mean that they can implement it in practice. In a meta-analysis of articles by Dignath et al. (2022) on inclusive education from 40 countries on a total of 40,898 teachers, it was stated that teachers' belief systems about the inclusion of students with disabilities can explain the gap between policy and practice.

In relation to teachers' attitudes toward inclusive education, we sought to determine the general climate among teachers regarding attitudes towards inclusive education, further differentiating teachers' attitudes into three components: affective, cognitive, and behavioral.

CONCLUSION

While the attitudes of teachers towards IE are generally positive, additional efforts are needed to reduce the gap between the concept of inclusive education and its implementation. According to Ajzen's theory of planned behavior, teachers will be more determined to implement IE if they have positive attitudes toward it. Generally positive attitudes towards IE, even through all three components of attitude (cognitive, affective, and behavioral), open up opportunities for active collaboration with teachers from all the stakeholders that make up the school. These research results are encouraging, but in a way, they also call for finding ways and modalities to maintain them as such. It is certainly necessary to identify the challenges faced by teachers in the inclusive classroom and affirm positive factors while striving to eliminate or minimize factors that lead to the formation of negative attitudes.

The Croatian version of the MATIES questionnaire for researching attitude components can serve as a reliable instrument with high internal reliability and construct validity, as well as high saturation of all items in the three-factor model.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Nevertheless, the results of the study must be taken with caution. In such studies, there is a risk that some participants may not reflect their true attitudes but rather choose answers that represent desirable behavior/attitudes or partially soften their views. This problem can be partially alleviated by conducting polls in the school itself using the "ballot box" method. This method, unlike online questionnaires, reduces social bias and fosters trust in the anonymity of the research and the honesty of the respondents.

The research was conducted in the summer semester, towards the end of the school year, so the factor of fatigue and increased levels of stress, and thus likely frustration with certain situations in the inclusive classroom, should be considered. The aforementioned circumstances in which the study was conducted could have had negative implications on attitudes, especially on affective and behavioral components. Future studies should avoid the beginning or end of the school year as a period for data collection. It is possible that data collection venues such as professional conferences may offer more favorable circumstances for respondents. Also, in future studies, in addition to the MATIES questionnaire, it would be desirable to use other attitude-gathering questionnaires that use neutral or indirect questions that can be useful in reducing bias.

Lastly, the vast majority of participants are female, making the sample uneven in that regard, which is actually very difficult to avoid given the gender structure of teachers in Croatia, where the female gender dominates in the total population of teachers. This finding in our research suggests a good basis for strengthening and enhancing the inclusive paradigm in primary education. Future studies should focus on factors influencing teachers' attitudes to resolve dilemmas, uncertainties, and implementation problems in inclusive education practices.

We also believe that the subject of future research should be the fact that not all components of an attitude influence the formation of an attitude equally. Therefore, researchers should focus on factors that influence the formation of each component of an attitude. Future research could certainly explore which factors influence attitude-behavior consistency and to what extent exposure to certain factors (positive or negative) affects the consistency of the attitude-behavior relationship. Given that new educational policies often require teachers to adapt their teaching practices, which can lead to additional stress or frustration for teachers,

it would be useful to monitor the impact of these changes on attitude components through longitudinal studies, particularly the affective and behavioral components. Support from professional services in schools has proven to be a strong factor in shaping teachers' attitudes, so monitoring the increase or absence of professional support and its effect on teachers' attitudes could also be the subject of longitudinal studies.

FINANCIAL SUPPORT-This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

CONFLICT OF INTEREST-The authors declare that they have no conflicts of interest.

ETHICAL APPROVAL-The study was conducted with the permission of the Ministry of Science and Education for conducting research in primary schools (Class: 602-01/23-01/00144, Reg. No.: 533-06-23-0002) and with the approval of the Ethics Committee of the Faculty of Health Sciences, University of Novo mesto, number UNM 47/2024.

DATA AVAILABILITY AND TRANSPARENCY-Anonymized datasets are available from the authors upon reasonable request. Data are not publicly available.

Validirana Hrvatska verzija MATIES upitnika				
Kognitivna komponenta				
1. Vjerujem da inkluzivna škola omogućava akademski razvoj svim učenicima bez obzira na njihove mogućnosti	1	2	3	4
2. Vjerujem da bi učenici s teškoćama trebali pohađati specijalne škole	1	2	3	4
3. Vjerujem da inkluzija potiče društveno primjereno ponašanje među svim učenicima	1	2	3	4
4. Vjerujem da svaki učenik može učiti iz redovnog kurikuluma škole ako je kurikulum adaptiran prema individualnim potrebama	1	2	3	4
5. Vjerujem da bi učenici s teškoćama trebali biti odvojeni jer je preskupo raditi tehničke preinake fizičkog okruženja škole	1	2	3	4
6. Vjerujem da bi učenici s teškoćama trebali biti u specijalnim školama kako ne bi i doživjeli iskustvo odbacivanja u redovnim školama	1	2	3	4
Afektivna komponenta				
1. Postanem frustriran kada imam problema u komunikaciji s učenicima s teškoćama u razvoju	1	2	3	4
2. Postanem uzrujan kada učenici s teškoćama ne mogu slijediti kurikulum iz dana u dan	1	2	3	4
3. Postanem razdražen kada ne mogu razumjeti učenika s teškoćama u razvoju	1	2	3	4

4. Postane mi nelagodno kada se treba uključiti učenik s teškoćama u razvoju u razred s ostalim učenicima bez teškoća	1	2	3	4
5. Zbunjen sam što su učenici s teškoćama u razvoju uključeni u redovite razrede bez obzira na ozbiljnost teškoće ili oštećenja	1	2	3	4
6. Postanem frustriran kada moram prilagođavati kurikulum prema individualnim potrebama učenika	1	2	3	4
Bihevioralna komponenta				
1. Voljan sam ohrabrivati učenike s teškoćama kako bi sudjelovali u svim aktivnostima u redovnom razredu	1	2	3	4
2. Voljan sam prilagođavati kurikulum prema individualnim potrebama svih učenika, bez obzira na njihove sposobnosti	1	2	3	4
3. Voljan sam fizički uključiti učenike s velikim teškoćama/oštećenjima u redovan razred s potrebnom potporom	1	2	3	4
4. Voljan sam uraditi tehničke preinake fizičkog okruženja kako bih uključio djecu s teškoćama u redovan razred	1	2	3	4
5. Voljan sam adaptirati svoje komunikacijske tehnike kako bih osigurao da svi učenici s emocionalnim ili bihevioralnim teškoćama budu uključeni u redovan razred	1	2	3	4
6. Želim prilagoditi načine ocjenjivanja pojedinih učenika kako bi se omogućilo inkluzivno obrazovanje	1	2	3	4

Validated Croatian Version of the MATIES Questionnaire [Translation: Željka Starčević]				
Cognitive Component				
1. I believe that an inclusive school enables academic development for all students regardless of their abilities	1	2	3	4
2. I believe that students with disabilities should attend special schools	1	2	3	4
3. I believe that inclusion encourages socially appropriate behaviour among all students	1	2	3	4
4. I believe that every student can learn from the regular school curriculum if it is adapted to individual needs	1	2	3	4
5. I believe that students with disabilities should be separated because it is too expensive to make technical adjustments to the school's physical environment	1	2	3	4
6. I believe that students with disabilities should be in special schools so they do not experience rejection in regular schools	1	2	3	4

Affective Component				
1. I become frustrated when I have communication problems with students with developmental disabilities	1	2	3	4
2. I become upset when students with disabilities cannot keep up with the curriculum day by day	1	2	3	4
3. I get irritated when I cannot understand a student with developmental disabilities	1	2	3	4
4. I feel uncomfortable when a student with developmental disabilities needs to be included in a class with other students without disabilities	1	2	3	4
5. I feel confused that students with developmental disabilities are included in regular classes regardless of the severity of their disability or impairment	1	2	3	4
6. I become frustrated when I have to adapt the curriculum to individual students' needs	1	2	3	4
Behavioural Component				
1. I am willing to encourage students with disabilities to participate in all activities in the regular classroom	1	2	3	4
2. I am willing to adapt the curriculum to the individual needs of all students, regardless of their abilities	1	2	3	4
3. I am willing to physically include students with severe disabilities/ impairments in regular classrooms with appropriate support	1	2	3	4
4. I am willing to make technical modifications to the physical environment to include children with disabilities in regular classrooms	1	2	3	4
5. I am willing to adapt my communication techniques to ensure all students with emotional or behavioural difficulties are included in regular classrooms	1	2	3	4
6. I want to adapt assessment methods for individual students to enable inclusive education	1	2	3	4

REFERENCES

Barnová, S., Kožuchová, M., Krásna, S. & Osaďan, R. (2022). Teachers' Professional Attitudes Towards Inclusive Education. *Emerging Science Journal*, 6, 13-24. https://www.ijou rnalse.org/index.php/ESJ/article/view/1037 /pdf

Bishop, P.A. & Herron, R.L. (2015). Use and Misuse of the Likert Item Responses and Other Ordinal Measures. *International Journal of Exercise Science*, 1, 297-302. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4833473/

Boyle, C., Topping, K., Jindal-Snape, D. & Norwich, B. (2012). The importance of peer-support for teaching staff when including children with special educational needs. *School Psychology International*, 33(2), 167–182. 10.1177/0143034311415783

Borić, S. & Tomić, R. (2012). Stavovi nastavnika osnovnih škola o inkluziji. *Metodički obzori 16*(7), 75-86. https://hrcak.srce.hr/87847

Butakor, P. K., Ampadu, E. & Suleiman, S. J. (2018). Analysis of Ghanaian teachers' attitudes toward inclusive education. *International Journal of Inclusive Education*, *24*(11), 1237–1252. https://doi.org:10.1080/13603116.2018.1512661

Čarnická, M., Rochovská, I., Kušnírová, V. & Šilonová, V. (2023). Attitudes of Teaching Staff in Kindergartens Towards Inclusion and Their Opinions on Inclusive Education. *Special Education,* 45, 25-49. https://doi.org/10.15388/se.2023. 45.3

Ćwirynkało, K., Kisovar-Ivanda, T., Gregory, L.J., Żyta, A., Arciszewska, A. & Zrilić, S. (2017). Attitudes of Croatian and Polish elementary school teachers towards inclusive education of children with disabilities. *Hrvatska revija za rehabilitacijska istraživanja*, 53, Supplement, 252-264. https://hrcak.srce.hr/193758

Ćwirynkało, K. & Myśliwczyk, I. (2016). Mainstream School Teachers' Attitudes Toward Inclusion of Children with Special Educational Needs in Poland. In: Titrek, O, Mikelsone, I., Pavitola, L., Sezen Gültekin, G. (Ed.), ICLEL2016 Conference Proceeding Book. 2nd International Conference on Lifelong Education and Leadership for All. Sakarya: Sakarya University, 680-687.

De Boer, A., Pijl, S. J. & Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, *15*(3), 331–353. https://:doi.org:10.1007/s10212-011-0096-z

Desombre, C., Lamotte, M. & Jury, M. (2018). French teachers' general attitude toward inclusion: The indirect effect of teacher efficacy. *Educational Psychology*, *39*(1), 1-13. https://doi.org:10.1080/01443410.2018.1472219

Dias, P.C. & Cadime, I. (2016). Effects of personal and professional factors on teachers' attitudes towards inclusion in preschool. *European Journal of Special Needs Education*, *31*(1), 111–123. https://doi.org/10.1080/08856257.2015.1108040

Dignath, C., Rimm-Kaufman, S., van Ewijk, R. & Kunter, M. (2022). Teachers' Beliefs About Inclusive Education and Insights on What Contributes to Those Beliefs: A Meta-Analytical Study. *Educational Psychology Review*, *34*(3), 2609–2660. https://doi.org/10.1007/s10648-022-09695-0

Dmitrović, P. (2011). Preduvjeti za primjenu inkluzije. *Metodički obzori*, *13*(6), 69-82. https://doi.org/10.32728/mo.06.3.2011.05

Državni pedagoški standard osnovnoškolskog sustava odgoja i obrazovanja (2008). *Narodne novine* NN 63/2008. https://narodne-novine.nn.hr/clanci/sluzbeni/2008_06_63_2129.html

Državni zavod za statistiku (2020). *Osnovne škole i dječji vrtići i druge pravne osobe koje ostvaruju programe predškolskog odgoja, kraj šk. g. 2018./2019. i početak šk./ped. g. 2019./2020*. Dostupno na stranicama Državnog zavoda za statistiku: https://web.dzs.hr/Hrv_Eng/publication/2020/SI-1663.pdf

Dubayova, T. & Haficova, H. (2024). Teachers' attitudes towards inclusion in Slovakia - psychometric characteristics of the maties questionnaire, ICERI 2024 Proceedings, 7333–7337.

Ewing, L.D., Monsen, J.J. & Kielblock, S. (2018). Teachers' attitudes towards inclusive education: a critical review of published questionnaires. *Educational Psychology in Practices*, *34*(2), 150-165. https://doi.org/10.1080/02667363.2017.1417822

Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin, 132*(5), 778–822. https://doi.org/10.1037/0033-2909.132.5.778

Hogg, M.A., & Tindale, S.R. (2001). Blackwell Handbook of Social Psychology: Group Processes. Malden, Massachusetts: Blackwell Publishers.

Jurca, A.M., Baciu, D., Lustrea, A., Sava, S. & Borca, C.V. (2023). Exploring Attitudinal Dimensions of Inclusive Education: Predictive Factors among Romanian Teachers. Educ. Sci.13, 1224. https://doi.org/10.3390/educsci13121224

Jury, M., Perrin, A.L., Rohmer, O. & Desombre, C. (2021). Attitudes Toward Inclusive Education: An Exploration of the Interaction Between Teachers' Status and Students' Type of Disability Within the French Context. *Frontiers In Education*, 6, 1-7. https://doi.org/10.3389/feduc.2021.655356

Brčić-Karamatić, M. & Viljac, T. (2019) Stavovi nastavnika o inkluzivnom odgoju i obrazovanju. *Magistra iadertina*, (13), 91–101. https://hrcak.srce.hr/217834

Kranjčec-Mlinarić, J., Žic-Ralić, A. & Lisak, N. (2016). Promišljanje učitelja o izazovima i barijerama inkluzije učenika s poteškoćama u razvoju. *Školski vjesnik: časopis za pedagogijsku teoriju*, 65, 233-247. https://hrcak.srce.hr/160178

Krischler, M. & Pit-Ten Cate I.M. (2019). Pre-and In-Service Teachers' Attitudes Toward Students With Learning Difficulties and Challenging Behavior. *Frontiers in Psychology,*10, 1–10. https://doi.org/10.3389/fpsyg.2019.00327

Lautenbach, F. Antoniewicz, F (2018). Ambivalent implicit attitudes towards inclusion in preservice PE teachers: The need for assessing both implicit and explicit attitudes towards inclusion. *Teaching and Teacher Education*, 72, 24–32. https://doi.org/10.1016/j.tate.2018.01.003

Lohmann, A., Wiedebusch, S., Hensen, G., & Mahat, M. (2016) Multidimensional Attitudes toward Preschool Inclusive Education Scale (MATPIES)–ein Instrument zur Erhebung der Einstellung frühpädagogischer Fachkräfte zu Inklusiver Bildung. *Frühe Bildung*, 5, 198-205. https://doi.org/10.1026/2191-9186/a000282

Mahat, M. (2008). The development of a psychometrically-sound instrument to measure teachers' multidimensional attitudes toward inclusive education. *International Journal of Special Education*, *23*(1), 82–92. https://www.researchgate.net/ publication/289176114

Martan, V. (2018). Pregled istraživanja inkluzivnog odgoja i obrazovanja iz perspektive učitelja i studenata. *Školski vjesnik: časopis za pedagogijsku teoriju i praksu,* 67(2), 265-285. https://hrcak.srce.hr/file/316278

Memišević, H. & Hodžić, S. (2017). Teachers' attitudes towards inclusion of students with intellectual disability in Bosnia and Herzegovina. *International Journal of Inclusive Education*, *15*(7), 699–710. DOI:10.1080/13603110903184001

Mentel, H., Forster, N., Forthmann, B. & Souvignier, E. (2024). Predictors of teachers' behavioral intentions in inclusive education and their changes over time: A competitive test of hypotheses *Teaching and Teacher Education*, 117, 1–13. https://doi.org/10.1016/j.tate.2024.104509

Mihić-Skočič, S., Vlah, N. & Šokić, M. (2018). Stavovi odgajatelja i učitelja prema inkluziji djece s oštećenjem sluha. *Hrvatska revija za rehabilitacijska istraživanja*, *54*(1), 69-82. https://hrcak.srce.hr/file/300084

Milković-Nikčević, A., Jurković, D. & Perković, L. (2017). Stavovi učitelja i nastavnika Ličko-Senjske županije o provedbi odgojno-obrazovne inkluzije. *Školski vjesnik: časopis za pedagogijsku teoriju i praksu*, 66(4), 527-555. https://hrcak.srce.hr/193668

Nakić, S. (2014). Područja primjene stavova potrošača. *Praktični menadžment*, 5(1), 14-21. https://hrcak.srce.hr/file/ 198999

Penava-Brekalo, Z. (2010). Socijalno-kognitivna teorija ličnosti u kontekstu osobnog marketinga. *Ekonomski vjesnik*, *XXIII* (1), 240-247. https://hrcak.srce.hr/59095.

Rochovska, I. (2022). Attitudes of preschool teachers and assistants towards inclusive education in Slovakia. Proceedings of EDULEARN22 Conference 4th-6th July 2022, Palma, Mallorca, Spain. ISBN: 978-84-09-42484-9, 6227-6233.

Saaloviita, T. (2019). Teacher attitudes towards the inclusion of students with support needs. *Journal of Research in Special Educational Needs*, *20*(1), 64-73. doi:10.1111/1471-3802.12466

Scheer, D. & Melzer, C. (2020). Trendanalyse der KMK-Statistiken zur sonderpadagogischen ¨ Forderung ¨ 1994 bis 2019 [Trend analysis of the KMK statistics on special educational needs support from 1994 to 2019]. *Zeitschrift für Heilpadagogik*, *71*(11), 575–591. https://doi.org/10.25656/01:24724

Schwartz, N., Bohner, G (2001). The Construction of Attitudes. Chapter 20. Oxford, UK: Blackwell, 436-457.

Sharma, U., Loreman, T., May, F., Romanoc, A., Lozano, C.S., Avramidis, E., Woodcock, S., Subban, P., & Kullman, H. (2024). Measuring collective efficacy for inclusion in a global context (2024). *European journal of special needs education*, 39(2), 167–184. https://doi.org/10.1080/08856257.2023.2195075

Sharma, U. & Sokal, L. (2015). Can Teacher's Self-Reported Efficacy, Concerns, and Attitudes Toward Inclusion Scores Predict Their Actual Inclusive Classroom Practices? *Australasian Journal of Special Education*, *40*(1), 21–38. https://doi.org/10.1017/jse.2015.14

Skočić Mihić, S., Gabrić, I. & Bošković, S. (2016). Učiteljska uvjerenja o vrijednostimainkluzivnog obrazovanja. *Hrvatska revija za rehabilitacijska istraživanja*, *52*(1), 30-41. https://hrcak.srce.hr/161498

Smith, R. (2014). Changing policy and legislation in special and inclusive education: a perspective from Northern Ireland. *British Journal of Special Education*, *41*(4), 382–402. doi:10.1111/1467-8578.12081

Štemberger, T. & Kiswarday, V. R. (2017). Attitude towards inclusive education: the perspective of Slovenian preschool and primary school teachers. *European Journal of Special Needs Education*, *33*(1), 47–58. https://doi.org/10.1080/ 08856257.2017.1297573

Toye, M.K., Wilson, C. & Wardle, A.G. (2018). Education professionals' attitudes towards the inclusion of children with ADHD: the role of knowledge and stigma. *Journal of Research in Special Educational Needs*, 19 (3), 184–196. https://doi.org/10.1111/14713802.12441

UNESCO. (2020). Global Education Monitoring Report 2020: Inclusion and Education: All Means All. UNESCO. 1–52. https://gem-report-2020.unesco.org/

UNESCO. (2023). Inclusion in Education. UNESCO. https://www.unesco.org/en/inclusion-education

Valovič, J. (2015). *Správa z merania inklúzie učiteľov: Aktivita 1.2*. [The Report of the measurement of teachers: Activity No 1.2.]. Bratislava: NÚCEM. https://www.etest.sk/data/att/9c1/483. 172871.pdf

Van Steen, T., & Wilson, C. (2020). Individual and cultural factors in teachers' attitudes towards inclusion: A meta-analysis. *Teaching and Teacher Education*, 95, 1-13. https://doi.org/10.1016/j.tate.2020.103127

Verplaken, B. & Orbell, S. (2022). Attitudes, Habits, and Behavior Change. *Annual Review of Psychology*, 73, 327-352. https://doi.org/10.1146/annurev-psych-020821-011744

Vican, D. & Karamatić-Brčić, M. (2013). Obrazovna inkluzija u kontekstu svjetskih i nacionalnih obrazovnih politika–s osvrtom na hrvatsku obrazovnu stvarnost. *Život i škola*, *59*(30), 48-66. https://hrcak.srce.hr/file/194732

Vidaković-Flajs, S. (2023). Stavovi učiteljica/učitelja razredne i predmetne nastave o inkluziji učenika s teškoćama u redovite programe školovanja. *Varaždinski učitelj*, *6*(13), 1-6. https://hrcak.srce.hr/308328

Vlah, N. (2014) Problemi u radu s učenicima s emocionalnim teškoćama i teškoćama u ponašanju i obrasci ponašanja u sukobima kod učitelja razredne nastave. *Pedagoška istraživanja*, *11*(1), 141-153. https://hrcak.srce.hr/139585

Vrcelj, S. (2020). Pedagoško savjetovanje. Rijeka: Filozofski fakultet. *Metodički obzori*, 16(2), 145-149. https://hrcak.srce.hr/273866

Warnes, E., Done, E.J. & Knowler, H. (2022). Mainstream teachers' concerns about inclusive education for children with special educational needs and disability in England under pre-pandemic conditions. *Journal of Research in Special Educational Needs*, 22, 1–43. https://doi.org/10.1111/1471-3802.12525

Wray, E., Sharma, U. & Subban, P. (2022). Factors influencing teacher self-efficacy for inclusive education: A systematic literature review. *Teaching and Teacher Education*, 117. https://doi.org/10.1016/j.tate.2022.103800

Yan, T. & Deng, M. (2019). Regular education teachers' concerns on inclusive education in China from the perspective of concerns-based adoption model. *International Journal of Inclusive Education, 23*(4), 384–404. DOI:10.1080/13603116.2018.1435741

Zrilić, S. (2018). Razlikovni kurikulum kao pretpostavka uspješne inkluzije. *Magistra Iadertina*, *13*, 161–180. https://hrcak.srce.hr/217840

Stavovi učitelja prema inkluzivnom obrazovanju mjereni MATIES skalom

Sažetak

Inkluzivno obrazovanje složen je koncept koji obuhvaća međudjelovanje prakse, kulture i politike koji pak oblikuju inkluzivnu praksu u složenim međuodnosima. Učitelji kao promotori inkluzivnoga obrazovanja imaju ključnu ulogu. Stavovi su složen konstrukt koji se sastoji od tri komponente (kognitivne, afektivne i bihevioralne), a kako su stavovi tendencije koje mogu usmjeravati ponašanje, učitelji će vjerojatnije provoditi inkluzivne prakse ako imaju pozitivne stavove. Cilj istraživanja bio je utvrditi metrijske karakteristike i konstruktnu valjanost višedimenzionalne MATIES skale o stavovima učitelja prema inkluzivnom obrazovanju (IE), a zatim istražiti kako učitelji u osnovnim školama u Hrvatskoj procjenjuju svaku od tri komponente stava prema obrazovanju. Istraživanje je provedeno između 1. svibnja i 30. srpnja 2024. kao presječna studija na probabilističkom uzorku od 478 učitelja osnovnih škola diljem Hrvatske (F = 445, M = 33), i to online upitnikom korištenjem višedimenzionalne MATIES skale. Korištena je Likertova skala s četiri stupnja, s deskriptivnim indikatorima i t-testovima postavljenima na 2,5 za neutralan stav. Konfirmatorna faktorska analiza potvrdila je konstruktnu valjanost MATIES upitnika. Sve tri podskale pokazale su visoku unutarnju pouzdanost. Stavovi učitelja bili su općenito pozitivni (M = 2,60) i sve tri komponente stava također su pozitivno ocijenjene: kognitivna komponenta (M = 2,60), afektivna komponenta (M = 2,96) i bihevioralna komponenta (M = 3,23). Bihevioralna komponenta stava objasnila je najveći postotak varijance s 38,65 %, zatim afektivna komponenta s 12,53 % i kognitivna komponenta s 9,65 %. Prevedeni i validirani MATIES upitnik ima zadovoljavajuće psihometrijske karakteristike i pouzdan je instrument koji se u ovom obliku može koristiti u daljnjim istraživanjima. Nalaz da učitelji imaju pozitivne stavove prema inkluziji trebao bi potaknuti kreatore inkluzivnih politika da dodatno podrže učitelje u cilju očuvanja pozitivnih stavova učitelja.

Ključne riječi: *stavovi učitelja, inkluzivno obrazovanje, djeca s teškoćama u razvoju, MATIES upitnik*