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## **FACTOR STRUCTURE OF THE ENGLISH LANGUAGE TEACHING REFLECTIVE INVENTORY (ELTRI) IN THE SERBIAN EDUCATIONAL CONTEXT**

Teacher reflection is becoming increasingly important in cultivating a responsible, critical, and autonomous work of teachers in practice. Little research has been conducted in Serbia, and these are predominantly theoretical. There is no validation of metric tools that could be applied in researching teacher reflection. The aim of the research illustrated in the present paper is to determine to construct validation of the factor structure of the English Language Teaching Reflective Inventory(ELTRI) within the Serbian educational context among primary school teachers. The research included 310 teachers of upper-primary subjects and elementary school grade teachers. We have applied exploratory factor analysis and extracted variables and determined four factors: affective, metacognitive, cognitive, and practical elements of teacher reflection. The reliability of the first three subscales (affective, metacognitive, and cognitive) was satisfactory, while the reliability of the fourth subscale (practical element of teacher reflection) proved to be low in our research. This is possibly caused by the research sample and education context of the respondents. The conclusion is that, in our sample, Teaching Reflective Inventory (ELTRI) can be used in a reduced form when testing teacher reflection, with 23 items and three factors. The present paper also gives the authors' recommendation of adding the practical element factor with an appropriate number of items which potentially obtain a four-factor solution to the questionnaire.

**Keywords:** factor structure; psychometric characteristics; teachers; reflective teaching

## 1. INTRODUCTION

In the recent years, issues of teacher competency and efficacious teaching are often to be found in the center of development and improvement of school instruction. In the past decades, and more so since the start of the COVID-19 pandemic, which occurred worldwide in the previous year, it has become evident that education systems should cater for current public needs. When the society is undergoing speeded and drastic changes, teachers become key intermediaries helping to bridge the gap between past, present, and future, and reconcile tradition and innovation (Hargreaves 2003; Moon 2004). To be capable of facing similar challenges, teachers must be dedicated to their profession, prepared to assess their work, and actively seek opportunities for development. In this regard, The Organization for Economic Co-operation and Development (OECD 2005) calls for transformation of the teaching profession, with teachers becoming active agents in the analysis of the personal practice in the light of professional standards and their students' progress.

Development and improvement of schools, as well as establishment of schools as learning communities resulted in the need for teachers to take lead in the lifelong process of professional development (Andevski, Budić, Gajić 2015; Marić Jurišin, Malčić 2021). Moreover, current research results indicate that teachers alone are the key link when analyzing the quality of education (Bilač 2015; EC 2010). Recent decades increasingly indicate the importance of reflective practice of the teachers as professionals who analyze their own work from different perspectives, developing their knowledge, improving their own practice and the rapport with students. The aim of this paper is to examine teacher reflection on a chosen sample and determine the factor structure of English Language Teaching Reflective Inventory (ELTRI) (Akbari, Behzadpoor, Dadvand 2010) for elementary grade and upper-primary grade teachers from Serbia. The research question of the present paper is: what is structural validity and reliability of the chosen instrument on sample in Serbia and in the educational context of Serbia?

## 2. TEACHER REFLECTION

The beginnings of reflective practice as an area applicable in different aspects of both personal and professional development are associated with the name of Donald Schon (Schon 1983; Schon 1987), who recognized the importance of reflection at the end of the 20<sup>th</sup> century. Schon sees reflection as a cycle that consists of critical examina-

tion of practice, development of the ideas and improvement of practice as well as implementing the ideas in practice (Akbari, Behzadpoor, Dadvand 2010). Also, Schon makes a distinction between reflection in action and reflection on action. Reflection in action is individual reflection that takes place while teaching, whilst reflection on action takes place after teaching and can also be exercised in groups (Akbari, Behzadpoor, Davand 2010).

Analyzing various definitions of the reflective practice, it can be identified as a kind of retrospection of one's work in regular time intervals (Schon 1987) which leads to becoming aware of and reviewing one's practice (Brookfield 1995) with the aim of finding activities one can implement in future work (Drew, Bingham 2001). The outcome of reflective practice is positive change (Brookfield 1995; Drew, Bingham 2001; Hegarty 2011; Ostermann, Kottkamp 2004; Schon 1987) that comes because of integration of theory and practice though cyclic process of individual experience and its application in professional development (Malešević 2015).

Regarding the components that a teacher, being a reflective practitioner, questions in his or her practice, the researchers speak of practical, cognitive, affective, metacognitive, critical, and moral elements of reflection (Akbari, Behzadpoor, Dadvand 2010). The practical component entails different tools and procedures that a teacher can utilize. These are teaching journals, class videotaped lessons, questionnaires, and conversation with colleagues (Farell 2004; Murphy 2001). The cognitive element involves those teacher activities that are in direct connection to professional development (scientific and professional conferences, courses, seminars, workshops, and books that are closely connected to the specific teaching area of the individual) (Akbari, Behzadpoor, Dadvand 2010; Farell 2004). The affective element is comprised of the teacher's relationship with students, and the students' emotional response to the teacher, as well as the class itself (Hiller 2005; Kazemi, Bazregarzadeh, Firoozi 2006). Metacognitive component entails the teacher's reflection on their personal beliefs and the influence of their affective "makeup" on their practice (Akbari 2007; Akbari, Behzadpoor, Dadvand 2010). The moral element of reflection is made up of everything pertaining to the teacher's moral beliefs in terms of justice, empathy and values. The critical element entails reflection on the socio-political aspect of education, and the items it encompasses relate to influence of politics on teaching practice and is associated with different areas of discrimination (race, gender, social class) (Akbari, Behzadpoor, Dadvand 2010). Each of the elements is fundamental for the comprehensive overview of the teaching practice and the scope of the effect on the students. The complexity of the teacher reflection construct illustrates the significance

of empirical research, so that strategies for development and improvement of this vital area of professional development could be developed.

The research that focuses on studying and analysis of the reflective teacher are predominantly theoretical (Farell 2004; Gnawali 2008; Gojkov 2010; Hillier 2005; Loughran 2002, Marić Jurišin, Malčić, 2021; Pollard, 2002) or they analyze and compare previous empirical research (Bilač 2015; Marcos, Miguel, Tillema 2009; Marcos, Miguel, Tillema 2011). The analysis of the aforementioned research leads to the conclusion that most papers deal with individual segments of teacher reflection (Marcos, Miguel, Tillema, 2009), or the influence of reflection on the practice and professional development (Bilač 2015). The choice of an instrument that covers all components of teacher reflection (Akbari, Behzadpoor, Dadvand, 2010) was based on this analysis. Following a detailed analysis of the related materials, the authors Akbari, Behzadpoor and Dadvand (2010) have extracted six elements (practical, cognitive, affective, metacognitive, critical and moral), each one consisting of 7 behavioral items and they encompass what is considered as reflective practice of the teachers (English Language Teaching Reflective Inventory – ELTRI). After the initial research and explorative and confirmatory analysis of the data were conducted, the instrument was reduced to 29 items by removing the moral element and by shortening the affective one, which means that the valid elements of the reflection that remained are cognitive, metacognitive, affective, practical and critical elements of the teacher reflection. The validation of the instrument was conducted on the sample of 308 teachers in private and public schools (Akbari, Behzadpoor, Dadvand 2010). Another validation process of this instrument was conducted in Turkey (Yesilbursa 2013). The results of the validation produced a four-factor key (affective and moral factors came out as unreliable) with 21 items, and the authors pointed out the significance of the testing of this scale in elementary and secondary education as well as in other cultures (Yesilbursa 2013). Our research of available resources has not found any other validations of this scale. Given that most of this research are based on theoretical approach and that there was no empirical research conducted in the Republic of Serbia, it was vital to test the psychometric characteristics of the instruments of the English Language Teaching Reflective Inventory (ELTRI), which is the goal of our research. Beside the overview of the inventory itself, this paper also gives overview of the factor structure, psychometric characteristics of the instruments, and further recommendations in the light of the results obtained.

### 3. METHODOLOGY

#### 3.1. *Sample and Procedure*

The research included 310 participants, 208 primary school subject teachers (67.1%) and 102 elementary school grade teachers (32.9%). Respondents come from 16 primary schools in the city of Novi Sad (Republic of Serbia). The sample is convenient, 16 out of a total of 22 schools in the territory of Novi Sad were included in the research. Out of all respondents, 62 are male (20%), and 248 females (80%). The average age of the female participants is 43.21 years ( $SD=8.80$ ), and the average age of the male subjects is 43.48 years ( $SD=10.42$ ), while the average age of all subjects is 43.26 years ( $SD=9.13$ ). Analyzing the years of experience, it is noticeable that most participants fall into the range of 15 to 25 years of experience, in total 108 subjects (34.8%). Among the respondents, 85 teachers (27.4%) have between 5 and 15 years of experience. There are 64 teachers (20.6%) with more than 25 years of experience, and 53 teachers (17.1%) who have between 1 and 5 years of experience. Among the female participants, the majority have 15 to 25 years of work experience, in total 86 of them (34.7%), while the fewest of them have 1 to 5 years of experience, namely 38 subjects (15.3%). Among the male participants, the majority are also those with 15 to 25 years of experience, 22 of them (35.5%) while the fewest among them have more than 25 years of work experience, i.e., 11 subjects in total (17.7%).

Although the research was not conducted by random sampling, demographic characteristics of the participants are comparable and diverse when regarded in relation to the total population of Serbian teachers (Statistical Office of the Republic of Serbia 2014).

The research was conducted in the interval between the January and September of 2020. Participants were given detailed instructions at the beginning and were acquainted with the aim of the research. The research was anonymous, and all respondents, while the instrument was filled out in writing, using the surveying and scaling techniques.

#### 3.2. *The Instrument*

The purpose of the first part of the instrument was collecting data about the personal characteristics of the subjects. English language teacher reflection inventory (ELTRI) scale was used in the second part of the instrument (Akbari, Behzadpoor, Dadvand

2010). The initial version of the scale contained 42 items and six factors. The piloting and testing of the tentative model through exploratory and confirmatory data analyses reduced the number of items to 29 items (Akbari, Behzadpoor, Dadvand 2010). The authors identified the following factors: practical, affective, cognitive, critical, and metacognitive in which all the loadings between the indicators and the latent factors as well as the covariance among the factors were significant at  $\alpha=.001$  (p-value < .001) (Akbari, Behzadpoor, Dadvand 2010). The revised and validated version (Akbari, Behzadpoor, Dadvand 2010) of the questionnaire was used in this research too. The subjects had a task of specifying the frequency of a certain statement on the five-point Likert scale, where 1 denotes never and 5 always. Examples of offered items are as follows: “I ask my students whether they like a teaching task or not”, and “I discuss practical/theoretical issues with my colleagues“.

### **3.3. Data analysis**

Factor analysis was done using the SPSS.19 software. We examined the latent structure of the questionnaire by applying the model of principal components and Promax rotation. To conduct a parallel analysis, we used Factor software (Factor 10.9.02) which was created by Lorenzo-Seva and Fernando (2006). The Kaiser-Mayer-Olkin test is satisfactory (KMO= .881), while Bartlett’s sphericity test reached significance at the level ( $\chi^2=3970.154$ ;  $p=.000$ ). The obtained data indicate that the matrix is appropriate for factorization. Further analysis includes those items whose communalities do not exceed .30 and which have cross loading on two or more factors.

### **3.4. Initial check of the questionnaire solutions**

By exploratory factor analysis and application of the Scree test, four factors were extracted (Image 1). Scree plot is used to determine the number of factors in an exploratory factor analysis. As we can see in Image 1, we determine four factors, because the point where the slope of the curve is clearly leveling off indicates the number of factors that should be generated by the analysis.

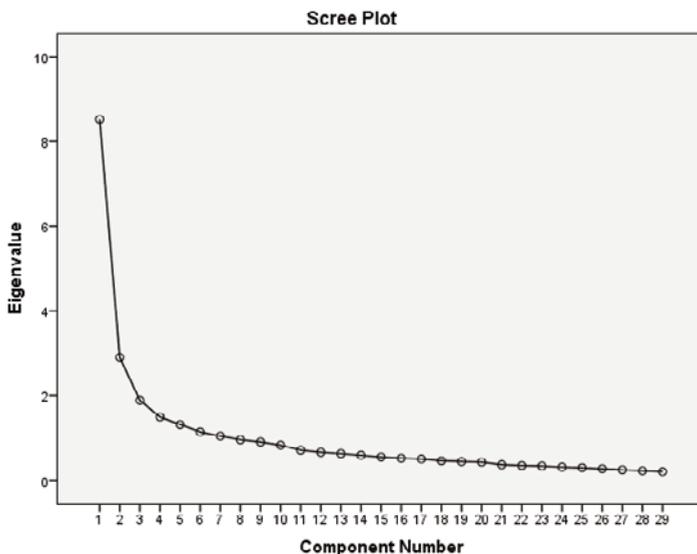


Image 1 Scree plot

Horn parallel analysis has determined four factors (Table 1).

**Table 1** Extraction of the number of factors

Factor No.	Eigenvalue	Variance percentage	Cumulative variance %	AS random eigenvalues	Decision
1	8,522	29,385	29,385	1,613	Accept
2	2,899	9,997	39,382	1,527	Accept
3	1,887	6,508	45,890	1,459	Accept
4	1,492	5,147	51,037	1,404	Accept
5	1,311	4,522	55,558	1,352	Reject
6	1,137	3,921	59,479		

“Parallel analysis is a procedure which rests on the assumption that only those dimensions whose characteristic roots are bigger than the characteristic roots which are obtainable based on random data with analogue characteristics are to be kept. Parallel analysis considers variability which is the result of specificities of sampling and can be viewed as a modification that is a correction of Kaiser-Guttman rule, since it gives an exact starting base for eliminating the dimensions whose variance is no bigger than the one expected from random data” (Subotić 2013: 206).

A four-factor model presented in Table 1 was supported by 54.01% variance of the questionnaire, and communalities vary from .324 to .649. The communality of item 5 is .140 and the item is therefore left out (Field 2009). (Table 2)

**Table 2** Communalities matrix

	Initial	Extraction
1	1,000	,329
2	1,000	,585
3	1,000	,411
4	1,000	,569
5	1,000	,140
6	1,000	,363
7	1,000	,543
8	1,000	,358
9	1,000	,554
10	1,000	,484
11	1,000	,617
12	1,000	,625
13	1,000	,470
14	1,000	,324
15	1,000	,376
16	1,000	,551
17	1,000	,616
18	1,000	,575
19	1,000	,591
20	1,000	,625
21	1,000	,513
22	1,000	,450
23	1,000	,587
24	1,000	,599
25	1,000	,528
26	1,000	,577
27	1,000	,587
28	1,000	,607
29	1,000	,649

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After eliminating the fifth item (Table 2), according to the component matrix (table 3), it is evident that there is crossloading on items 3 (.480 and .339) i 13 (.399 and .395).

**Table 3** Pattern Matrix

	Component			
	1	2	3	4
20	.821			
19	.797			
16	.775			
18	.775			
17	.714			
21	.650			
22	.550			
15	.529			
14	.445			
13	.399	.395		
11		.791		
12		.784		
9		.719		
7		.661		
10		.644		
8		.561		
3		.480		.339
6		.455		
26			.812	
29			.798	
28			.792	
27			.744	
25			.709	
24			.595	
23			.560	
2				.826
4				.720
1				.494

Eliminating the third item (“After each lesson, I write about the accomplishments/failures of the lesson or I talk about the lesson to a colleague”) and item thirteen („I talk to my students to learn about their learning styles and preferences“), we obtain pure factor structure (Table 4) whose percentage of variance explanation is 53.65%, and communality varies between .302 and .677.

**Table 4** Pattern Matrix

	Component			
	1	2	3	4
20. I think about my strengths and weaknesses as a teacher	.816			
19. I try to find out which aspects of my teaching provide me with a sense of satisfaction	.806			
18. I think of the meaning or significance of my job as a teacher	.786			
16. As a teacher, I think about my teaching philosophy and the way it is affecting my teaching	.762			
17. I think of the ways my biography, or my background affects the way I define myself as a teacher	.728			
21. I think of a positive/negative role models I have had as a student and the way they have affected me in my practice	.658			
22. I think of inconsistencies and contradictions that occur in my classroom practice	.561			
15. I ask my students whether they like a teaching task or not	.522			
14. I talk to my students to learn about their family backgrounds, hobbies, interests, and abilities	.398			
28. I think about the ways, gender, social class, and race influence my students' achievements		.805		
29. I think of outside social events that can influence my teaching inside the class		.804		
26. I think about political aspects of my teaching and the way I may affect my students' political views		.803		
27. I think of ways through which I can promote tolerance and democracy in my classes and in the society in general		.749		
25. In my teaching I include less-discussed topics, such as old age, Aids, discrimination against women and minorities, and poverty		.717		
24. I think of ways to enable my students to change their social lives in fighting poverty, discrimination, and gender bias		.602		
23. I think about instances of social injustice in my own surroundings and try to discuss them in my classes		.555		
11. I carry out small scale research activities in my classes to become better informed of learning/teaching processes			.773	
12. I think of classroom events as potential research topics and think of finding a method for investigating them			.771	
9. I think of writing articles based on my classroom experience			.715	
7. I read books/articles related to affective teaching to improve my classroom performance			.675	
10. I look at journal articles or search the Internet to see what the recent developments in my profession are			.663	
8. I participate in workshops/conferences related to teaching/learning issues			.574	
6. I ask my peers to observe my teaching and comment on my teaching performance			.458	
2. I talk about my classroom experiences with my colleagues and seek their advice/feedback				.845
4. I discuss practical/theoretical issues with my colleagues				.718
1. I have a file where I keep my accounts of my teaching for reviewing purposes				.494

The first factor was named affective, and it entails the following items: 14, 15, 16, 17, 18, 19, 20, 21 and 22. The first factor encompasses teacher reflection regarding the affective relationship of teachers with students in the process of teaching (Akbari, Behzadpoor, Dadvand 2010; Hiller 2005). Based on the content of the second factor which contains items 23, 24, 25, 26, 27, 28, and 29 it was named the metacognitive. This factor encompasses the teacher's self-reflection regarding their beliefs, personality, as well as the way they define their work in practice (Akbari, Behzadpoor, Dadvand 2010; Hiller 2005). The third factor was named cognitive, and this includes the following items: 6, 7, 8, 9, 10, 11 and 12. This factor encompasses professional development of one's own practice in the light of life-long learning (Akbari, Behzadpoor, Dadvand 2010; Farrell 2004). The fourth factor was named practical, and it is comprised of the following items: 1, 2 and 4. This factor encompasses practical tools that teachers use in their work and practice (Farrell 2004; Richards, Farrell 2005).

Based on the correlation matrix (Table 5) we can conclude that factors correlate moderately and positively, where the strongest correlation can be seen between the first and the second factor (.53), related to affective and metacognitive domain of the teacher reflection.

**Table 5** Component Correlation Matrix

Component	1	2	3	4
1	1.000	.531	.306	.262
2	.531	1.000	.337	.293
3	.306	.337	1.000	.224
4	.262	.293	.224	1.000

### ***3.5. Reliability of the questionnaire***

Subscale of the first factor encompasses 9 items, where Cronbach's alpha for the first factor (affective factor of reflection) is .865. Based on the item analysis it is noticeable that the reliability of the first factor would not change by removing any of the items (Table 6).

**Table 6** Item analysis of the subscale of the first component

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected if Item-Total Correlation	Cronbach's Alpha if Item Deleted
20	30.7129	23.584	.678	.844
19	30.8290	23.288	.678	.843
18	30.7968	23.094	.653	.845
16	30.9355	23.433	.607	.850
17	31.0645	22.520	.697	.841
21	31.0194	23.430	.593	.851
22	31.0613	23.941	.551	.855
15	30.9484	25.221	.460	.863
14	31.0581	24.929	.451	.864

Subscale number 2 (Metacognitive factor of reflection) has the Cronbach's alpha of .868 and encompasses seven items. Item analysis of this factor subscale would not be altered by removing any item (Table 7).

**Table 7** Item analysis of the second factor subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected if Item-Total Correlation	Cronbach's Alpha if Item Deleted
28	20.3613	22.413	.662	.846
29	22.452	22.846	.699	.841
26	20.7968	22.421	.602	.856
27	19.8516	23.331	.660	.847
25	20.2452	23.027	.622	.852
24	19.9613	23.422	.659	.847
23	19.9452	23.935	.603	.854

The third subscale (cognitive factor of reflection) encompasses seven items, and the reliability of this subscale is .831. Item analysis of the third factor has confirmed that the reliability of the subscale would not alter when removing any of the items (Table 8).

Reliability of the fourth subscale (Practical factor of reflection) is .547 and encompasses three items. After the item analysis (Table 9), it can be concluded that its reliability would not be satisfactory even after removing any of the items. We can reason that the reliability of the fourth scale is quite low and that it cannot be used in further procedure.

**Table 8** Item analysis of the third factor subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected if Item-Total Correlation	Cronbach's Alpha if Item Deleted
11	19.5581	18.675	.648	.796
12	19.5355	18.101	.680	.790
9	20.3194	18.535	.599	.805
7	18.7742	20.337	.632	.802
10	18.9032	19.887	.591	.806
8	18.6806	21.823	.510	.819
6	19.7323	20.973	.422	.833

**Table 9** Item analysis of the fourth factor subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected if Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	8.4516	1.478	.302	.608
2	8.3323	1.459	.501	.314
4	8.7903	1.480	.368	.496

We can conclude that this scale can be used as a three-component scale on a sample of this size and recommend using a shortened version of the scale with three factors (affective, cognitive, and metacognitive) and 23 items. This result is different from earlier results obtained in other research (Yesilbura 2013), which can possibly be related to the sample of the research, as well as the educational context.

#### 4. DISCUSSION

Having in mind that the result of the reflection is improving the work of teachers in terms of raising self-awareness about their decisions in the classroom (Bandur, Maksimović 2013; Maksimović, Osmanović, Stošić 2018) and a way of honing professional competencies of teachers (Živković 2005), we considered it to be of great importance to examine the construct of teacher reflection.

The focus of the research illustrated here was to determine the factor structure of the Teacher Reflection Inventory (ELTRI). The interest in such empirical research stems from many theoretical research, as well as a lack of tested facts in practice. The composite structure of the instrument was made up by 29 items, which were

grouped by the authors into five factors (Akbari, Bezapoor, Dadvand 2010). The latent structure of the questionnaire was tested by applying Principal Component Analysis (PCA) and Promax factor rotation. The application of the parallel analysis allowed removal of those items whose communalities do not exceed .30 and which have cross loading on two or more factors. Based on the extracted variables, four factors of teacher reflection were established: affective, metacognitive, cognitive, and practical. The reliability of the first three scales (affective, metacognitive, and cognitive) is satisfactory, which means they could be used as separate scores in this form, and their reliability would not alter by removing any of the items. The reliability of the fourth subscale, i.e., the practical element of teacher reflection, which contained three items, proved low in our research, which implies it cannot be used in further procedure. Moreover, analysis of the results suggests that a certain number of items could be added to this factor, which would potentially lead to higher reliability of the practical element of reflection. A potential reason behind lack of discrimination of the critical element by the teachers can be explained by different educational contexts and environments in which the instrument was validated. The areas covered by the critical element of reflection in our teaching context can be assigned to metacognitive component, which, in general, integrates the teachers' beliefs. In accordance with this, moral elements of the teacher reflection (which was the sixth factor in the original scale (Akbari, Behzadpoor, Dadvand 2010), and which was eliminated in the validation could be assigned to the metacognitive component).

We can reason that our sample has shown that the tested scale of teaching reflective inventory cannot be used as a four-factor scale but only as a three-factor scale with 23 items which make up the affective, metacognitive, and cognitive element of reflection. Based on the scientific literature available to the researchers, we have opted for using the analyzed element (Akbari, Bezapoor, Dadvand 2010), albeit having in mind possible restrictions, pointed out by the authors of the instrument themselves, which relate to reliability of its subscales in different pedagogical contexts (Akbari, Bezapoor, Davdand 2010). Hence, a three-component solution is not surprising.

## 5. CONCLUSION

We can conclude that on our sample, the inventory (ELTRI) cannot be used as a four-factor scale, and we suggest using the condensed version which measures teacher reflection (23 items). This scale would measure three factors of reflection: cognitive,

metacognitive, and affective. Another suggestion would be to add to the fourth factor (practical element of teacher reflection), whose reliability was proven low, in all probability due to the small number of items it contained.

Validation of this inventory and the possibility of its use are important steps in the professional development of our teachers because the reflective approach in one's practice represents an important prerequisite for improvement of the teaching practice and inherently the whole education system. An idea that came up as a suggestion for further research was to include high school and university teachers, as they come with a different set of challenges altogether, working with students of different ages. Hence, they observe their reflection in a different light. We believe that expanding the sample would lead to generalizability of results.

This research has several limitations and deficiencies. The first one is the fact that it was conducted in a different cultural context, hence the results are different from the validated original questionnaire. Furthermore, by using the proposed model, it would be important to assess the structure of the ELTRI questionnaire on different samples of teachers as well as those who teach in various contexts.

Finally, research conducted on a larger-scale sample could potentially determine to which extent these findings could be compared with different sub-populations.

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## **FAKTORSKA STRUKTURA SKALE NASTAVNIČKE REFLEKSIJE (ELTRI) U OBRAZOVNOM KONTEKSTU SRBIJE**

### **Sažetak:**

Nastavnička refleksija sve češće zauzima značajno mesto u unapređenju odgovornog, kritičkog i nezavisnog delovanja nastavnika u praksi. U Srbiji je rađen neznatan broj istraživanja na ovu temu i to prevashodno teorijskog karaktera, a ne postoji ni validacija metrijskih alata koji bi mogli imati primenu u istraživanju nastavničke refleksije. U skladu sa tim cilj istraživanja u ovom radu je utvrđivanje validacije faktorske strukture Skale Nastavničke refleksije (ELTRI) u obrazovnom kontekstu Srbije. U istraživanju je učestvovalo 310 nastavnika nižih i viših razreda. Sprovođenjem paralelne analize i izdvojenih varijabli imenovana su četiri faktora: afektivni, metakognitivni, kognitivni i praktični element nastavničke refleksije. Pouzdanost prve tri subskele (afektivne, metakognitivne i kognitivne) je zadovoljavajuća, dok se pouzdanost četvrtre subskele (praktičnog elementa refleksije nastavnika) u našem istraživanju pokazala kao niska, što ukazuje na to da se ona ne može koristiti u daljem postupku. Zaključak je da se u ispitivanju nastavničke refleksije skala (ELTRI) može koristiti u skraćenom obliku sa 23 ajtema i tri faktora. U radu je takođe data i preporuka autora u vidu predloga sa dopunom praktičnog faktora odgovarajućim brojem ajtema sa ciljem eventualnog dostizanja četvorofaktorskog rešenja upitnika.

**Ključne reči:** faktorska struktura; psihometrijske karakteristike; nastavnici; refleksivna nastava

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