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FUNCTIONAL ABILITIES OF CHILDREN AS FACTORS OF SCHOOL ACHIEVEMENT

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S.I.F.T.E.R. scale.

Abstract. Understanding the factors which affect students' school achievement is an important knowledge source for strategic planning and encouraging changes in education. In this paper, we focused on examining the factors related to personal characteristics. The aim of this research was to determine the relation between school failure and achievements in certain functional abilities, such as: academic skills (reading, writing), attention, communication (receptive and expressive speech), class participation, and behavior. The sample included 195 younger school-age children of both genders. Students' functional abilities were assessed by the S.I.F.T.E.R. scale (Screening Instrument for Targeting Educational Risk). The results showed that school achievement correlated with all assessed functional abilities. The coefficient of multiple determination showed that 48% of individual differences in children's school achievement can be explained by individual differences in the given model of functional abilities. It should also be emphasized that only two functional abilities, attention and communication, were singled out as statistically significant particular predictors.

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Introduction

The prevailing belief in the literature and school practice is that school success is a significant predictor of optimal professional development and success in life, while school failure is a problem that should be worked on preventively (Scott et al., 2019). Students' school failure is a very complex and serious personal and social problem with numerous negative consequences on the overall development of their personality and their future life. The consequences of school failure are reflected both in a child's personality and their life in general, and can occur at the pedagogical-psychological level, as well as at the wider socio-economic level (Malinić & Gutvajn, 2012). They are most frequently manifested as the loss of motivation and feeling of helplessness, inferiority, withdrawal, and the development of negative personality traits. The motivation is an important predictor of many student outcomes such as self-efficacy, academic engagement and academic achievement (Opdenakker et al., 2012). Apart from that, negative attitudes toward school, teachers, and learning often occur, which further leads to disrupted communication within family and at school (Huang & Anyon, 2020). Authors of various theoretical orientations have dealt with school failure. Thus, there are many different definitions of the term 'failure' in the literature. Failure is most defined as: (a) a discrepancy between students' achievement and intellectual abilities (Bartels et al., 2002; Deary et al., 2007); (b) consequence of a discrepancy between students' abilities and demands placed upon them (Henderson & Mapp, 2002); and (c) a problem caused by various psychosocial factors (Subotnik et al., 2011). The consequences of school failure are educational, social, cultural, economic, and professional (Giavrimis & Papanis, 2008).

There are many different causes leading to someone being labelled as 'unsuccessful at school'. Causes of school failure with three broad groups of factors: family (parents' education level, parents' employment, material income, number of household members, completeness of the family, psychosocial climate in the family, family relations, parents' expectations) (Castro et al., 2015; Fan et al., 2011); school (teachers' preparation for educational work and the quality

of that work, organization of teaching, application of modern methods, forms and tools in teaching, interpersonal relations between students and teachers, general atmosphere in the school, expectations of teachers) (Asikhia, 2010); and students' personal characteristics (intelligence, values, interests, expectations) (Saklofske et al., 2012; Topor et al., 2010). This research examined some of the possible causes of school achievement that arise from the personal characteristics of students, examined how certain functional abilities of students affect school achievement.

One of the operational definitions of functional abilities can be found in the Functional Abilities Classification Tool – FACT (Klein & de Camargo, 2018). Authors define this construct as a child's use of skills in a typical environment without additional support. In other words, the level of functional abilities is determined by whether and to what extent a child needs support to participate in daily activities. The concept of functional abilities in this paper was observed as a superior construct with five important areas which may affect school achievement: academic skills (reading and writing), attention, communication, class participation, and behaviour. With regard to the aforementioned definition of functional abilities, it would mean that those children who need additional support in the mentioned areas have certain difficulties in functioning in the education process. Bearing in mind the complexity of causes of failure in school, as well as their multiplicity, in this research, the issue of failure in school will be considered as a consequence of difficulties that appear in school skills, communication, attention, participation during the class, and the student behaviour.

Reading and writing are most often considered basic academic skills. Difficulties in basic academic skills can lead to specific learning disabilities. This group of disorders most often includes reading disorders (dyslexia), writing disorders (dysgraphia and dysortography), and calculation disorders (dyscalculia). Difficulties in these skills can later cause problems in learning the content of other subjects. Specific learning disabilities, if left untreated, can potentially cause problems throughout life, including poorer school performance, lower self-esteem, higher rates of dropping out of school, greater psychological difficulties, poor mental health, as well as higher rates of unemployment (Edition, 2013). About 80% of cases of failure in school come precisely from some form of specific learning disabilities (Hudson et al., 2007). The prevalence of dyscalculia ranges from 5 to 6% (Shalev, 2004), and dyslexia and dysgraphia from 5 to 10% in the student population (Habib, 2000). It is believed that an individualized approach to the student and, if necessary, the creation of suitable educational programs in a way that suits the student himself, his interests, and capabilities can help overcome the present difficulties (Daniels & Stafford, 1999).

Attention plays a very important role in the process of processing information. It participates in the active selection of stimuli, the importance of which

is conditioned by its external characteristics, individual preferences, motivation, and cognitive strategies that a person uses (Gomes et al., 2000). Attention involves a series of processes such as filtering stimuli and balancing multiple stimuli, and attributing emotional significance to these stimuli (Ratey, 2001). There are two main forms of attention: passive and active. Passive attention refers to the involuntary process of focusing on external events that stand out from the environment, such as a sudden flash, sound, or strong smell. Active attention is voluntary and driven by alertness, concentration, interest, and needs such as curiosity and hunger. Active attention requires effort (Gaddes & Edgell, 1994). Attention is the first step in the learning process. One cannot understand, learn, or recall what one has not paid attention to when one comes into contact with certain content for the first time. Attention is highly significant both for cognitive development and the process of learning (Buha et al., 2017). General attention disorder is most often manifested in three forms, namely attention disorder without hyperactivity (ADD – Attention Deficit Disorder), attention disorder with hyperactivity (ADHD – Attention Deficit Hyperactivity), and a combined form. A large number of authors state that the prevalence of attention deficit disorder ranges from 2 to 11% in the population of children (Rešić et al., 2007). A child with attention deficit disorder cannot solve a task because they are impulsive, interrupt solving a task abruptly, have difficulty concentrating when learning, and usually disrupt the rest of the class, which poses a big problem for a teacher who does not know how to deal with such situation (Hughes & Cooper, 2007). In addition to general attention deficit disorder, there are also specific disorders which affect only one type of stimulus reception and processing, such as short-term or long-term auditory or visual attention. Many research studies show that the precision in reception and processing of auditory stimuli is very important in the process of learning (Northern & Downs, 2002). In 35% of students who had difficulties in receiving and processing auditory stimuli repeated a class at least once at school, while 13% of them requested additional support in education. The results of numerous studies indicate that minimum hearing dysfunctions have a negative influence on children's functioning in various areas, such as: communication, school achievement, and behaviour (Đoković et al., 2014; Hadjikakou & Stavrou, 2016). One of the very common disorders that affect students, and which teachers and even parents are often unaware of, are mild or minimal hearing impairments. Children who are in the developmental period must have precise hearing for the sake of quality speech and language development and understanding of school material. The authors who deal with this problem agree that the normal hearing threshold values for children should range from 0 to 15 dB, unlike adults whose normal hearing threshold is determined by the range from 0 to 20 dB (Bess et al., 1998; Northern & Downs, 2002). Furthermore, teachers observed behavioural problems in 20% of children with unilateral hearing loss. The rate of academic failure is 10

times higher in children with unilateral hearing loss compared to hearing peers. Research conducted in Serbia on 1,165 elementary school students showed that 8.1% had unilateral and 4.3% mild bilateral hearing impairments (Đoković & Ostojić, 2009). Children with minimal hearing loss face greater academic and social difficulties than children with normal hearing.

Learning language is a primary developmental process for children. It is necessary for children to develop their receptive (ability to understand) and expressive (ability to use) language skills to become effective communicators. A variety of people play a significant role in supporting this process, including parents/guardians, family members, educators (McIntyre et al., 2017). It is expected that younger children's families and school-aged children's families and classroom teachers facilitate language development since this primary process also lays the foundation for the learning of a secondary process, written language (Perfetti & Sandak, 2000). Educators working to support children's language development, need to assess and monitor children's receptive and expressive language learning progress for them to become effective communicators and lay the foundation for later developing literacy skills (i.e., reading and writing skills). When children start school, they encounter completely new factors that affect their language development. At younger school age, language competence expands and phonological, syntactic, and lexical-semantic development continues (Lazarević, 2006). A large number of studies have been conducted on the prevalence of speech and language disorders in school-age children in developed countries such as America, Canada, Great Britain, and Australia (ASHA, 2015). Law et al. (2000) based on a literature review related to the assessment of speech and language delay in British children found a prevalence of 2 to 25%. Research in Australia showed that 16 to 22% of speech and language disorders were recorded in children (McLeod & Harrison, 2009), while Canadian research showed a significantly lower prevalence of 8.04% (Beitchman et al., 1986). Research conducted in Serbia from 2015 shows that 19.9% of students from the 1st to 3rd grade of primary school have a speech-language disorder, 13.7% have dyslexia and 18.4% have dysorthographic disorders (Milankov, 2015). The question of the success of children with speech and language disorders in mastering school material and their position in school is very significant. Teachers should recognize children's possibilities and support children's development in every way. Their effectiveness in creating successful educational activities for children with speech and language disorders is greater if there is a partnership between teachers, specialists (speech therapists), and parents.

The variety of interests and their intensity at school age are important for the amount and quality of knowledge that students acquire during schooling and contribute to the engagement and greater involvement of students in class and to the design of the learning process as a whole. The engagement of primary school students is related not only to their educational achievements, but

also to their psychological characteristics. It is believed that an individualized approach to a student, and, if necessary, the development of appropriate education programs which meet the needs of students, their interests, and abilities, can help overcome the existing difficulties (Daniels & Stafford, 1999). The relation between students' school engagement, based on their interests and their school achievement, is significant when the achievement is measured by school grades and when teachers consider students' results on criterion-reference tests (Maksić & Tenjović, 2008). Students' class participation and appropriate behaviour requires: effort, persistence, concentration, attention, asking questions, and contributing to group discussion (Fredricks et al., 2004).

Among the authors, there is no agreement on the prevalence of behaviour problems among children of younger school age, so the results vary from study to study. Research conducted on the population of elementary school students in India indicates the presence of behavioural problems from 1.16% to as many as 43.1% of students (Jogdand & Naik, 2014). Estimates of the prevalence of behavioural problems range from 3.5% to 32.3% (Conley et al., 2014). Research conducted in southern Italy, in relation to teachers' and parents' assessments, indicates that every tenth child has serious emotional and behavioural difficulties (Gritti et al., 2014). Two large-scale British studies report that 10% of school-age children have psychological difficulties, with half the students having clinically serious behavioural problems (Whear et al., 2013). In Great Britain, a study was conducted on a sample of 10,438 children, aged 5 to 15 years, which determined that 5 to 6% of primary school children manifest externalized and 3 to 4% internalized behavioural problems (Mooij & Smeets, 2009).

Factors of school achievement are numerous and diverse and should thus be examined from different aspects. In this paper, we focused on examining several specific areas of functional abilities which may be the factors that affect school achievement. The aim of this research was to determine the relation between specific functional abilities and school achievement of students.

The authors main hypothesis is that difficulties which may occur in academic skills (reading and writing), attention, communication, class participation, and behaviour, act in synergy and affect the capacity of functional abilities in school achievement.

Method

Sample. Students attending the first, second, third, and fourth grade of elementary school participated in the research. Out of the total of 195 students, 44 attended the first grade (22.6%), 47 attended the second grade (24.1%), 55 attended the third grade (28.2%), and 49 attended the fourth grade (25.1%) of elementary school. There were 96 (49.2%) boys, and 99 (50.8%) girls. Serbian elementary and

secondary schools use a five-point grading system: unsatisfactory (1), satisfactory (2), good (3), very good (4), and excellent (5). Students' overall achievement at the end of each term represents the mean of final grades in each subject and is ranged accordingly: satisfactory (2.00–2.49), good (2.50–3.49), very good (3.50–4.49), and excellent (4.50–5.00). With regard to school achievement, there were 12 (6.2%) satisfactory students, 27 (13.8%) good students, 81 (41.5%) very good students, and 75 (38.5%) excellent students. The students were assessed by 8 primary school teachers. For the implementation of the research, consent was obtained from the parents/guardians of 195 children of younger school age.

Instrument. The S.I.F.T.E.R. scale (Screening Instrument for Targeting Educational Risk) by Anderson (1989) was used in the research. With the author's permission, the scale was linguistically validated for Serbian language. It includes five areas of assessment (i.e., academic skills, attention, communication, school participation, and behaviour) and has the total of 15 questions, three for each assessment area. Each question is graded from 1 to 5. It should be emphasized that the attention area refers to auditory attention, while communication refers to vocabulary, comprehension, and intelligibility of child's speech. At the end of the scale, there is an educational risk scoring matrix with three categories—pass, marginal, and at risk. The task of primary school teachers was to complete the S.I.F.T.E.R. scale for each student and add comments if necessary. Teacher comments are intended for notes about a child's health problems, repeating a grade, additional support, or a child's IEP. The teachers underwent a training in which they were given explanations on how to complete the S.I.F.T.E.R. scale. The original purpose of this scale was to assess children's functioning in a classroom and to identify those students who were at risk due to hearing problems. However, the S.I.F.T.E.R. scale also provides very reliable data on other functional characteristics of students in the process of education and is a good tool for predicting school achievement. Anderson (1989) recommends that each student who is assessed as marginal or at risk, should be examined in detail depending on their individual results. Thus, for example, failure in academic skills points to the need for educational assessment, failure in communication indicates the need for an assessment of a speech and language pathologist, and failure in school behaviour indicates the need for an assessment of a psychologist or a social worker. If the failure in the area of attention or class participation is combined with other areas, assessment of an audiologist may be suggested.

S.I.F.T.E.R. is an instrument that has been used in a large number of studies and has been shown to be very reliable and sensitive for detecting students who are at risk of school failure (Anderson, 1989; Tharpe et al., 2003; Khodaei et al., 2022). In this research, the reliability testing of the applied questionnaire was arranged on the examined sample, which showed good reliability, the Cronbach's alpha ranges from 0.81 to 0.96.

Based on this, the categorical variables in this research are academic skills, attention, communication, class participation, and behaviour, and the predictors are gender, class, and success. Academic achievement is the mean of grades in school subjects, in this research it was calculated for first, second, third, and fourth-grade students. In the first grade during the school year, the progress in achieving the prescribed outcomes is shown by a descriptive grade. According to the Rulebook (2013), there is a four-level scale for evaluating the success of first grade students. It consists of the following levels of progress: progress is less than expected; progress is constant but slower; progress is at the expected level; and progress is above the expected level. For the sake of easier data processing, we reformulated the advancements into grades from 2 to 5 (Rulebook, 2013).

Statistical data processing. Measures of descriptive statistics (arithmetic mean, standard deviation, frequencies), ANOVA, Pearson correlation coefficient, and multiple regression analysis were used in data processing.

Results

Table 1 shows basic measures of descriptive statistics for academic skills, attention, communication, class participation, and behavior in younger school-age children. With regard to the assessed areas, students achieved the best results in behavior and class participation, while somewhat lower scores results were obtained in communication, attention, and academic skills. The average grade of school achievement in children from the first to the fourth grade of elementary school was 4.12.

Table 1. Basic statistical indicators of the results of specific functional abilities on the S.I.F.T.E.R. scale and school achievement (n=195)

	M	*SD*	*Min.*	*Max.*
Achievement	4.12	.87	2	5
Academic skills	11.73	2.95	3	15
Attention	11.23	3.72	3	15
Communication	11.17	3.20	3	15
Class participation	12.00	3.37	3	15
Behavior	13.20	2.58	4	15

The application of Pearson correlation coefficient determined the presence of a statistically significant positive moderate and high correlation between school achievement and all specific areas of functional abilities, as well as the intercorrelation of these areas (more details in Table 2). Due to such high degree of correlation between the criterion variable and predictor variables, and due to high intercorrelation of predictor variables an, additional check was performed

in order to eliminate the possible suppressing effects. By checking statistical collinearity, it was determined that the tolerance for all predictor variables was above the limit of 0.10 and that the inflation factor was below 10, which indicated that none of the predictor variables was redundant.

Table 2. Correlation between school achievement and specific areas of functional abilities (*n*=195)

	Achievement	Academic skills	Attention	Communication	Class participation	Behavior
Achievement	-	.59	.65	.65	.65	.47
Academic skills	.59	-	.76	.85	.87	.56
Attention	.65	.76	-	.83	.83	.70
Communication	.65	.85	.83	-	.88	.59
Class participation	.65	.87	.83	.88	-	.63
Behavior	.47	.56	.70	.59	.63	-

Note. All correlation coefficients are significant at the 0.01 level.

Regression analysis was performed to determine the cumulative effect of analyzed specific areas of functional abilities on school achievement. All analyzed specific areas of functional abilities (i.e., academic skills, attention, communication, class participation, and behavior) were included in this model. The coefficient of multiple determination showed that 48% of individual differences in students' school achievement can be explained by individual differences in predictor variables, (i.e., in specific areas of functional abilities) (Table 3). The standard error was small and lower than the standard deviation of the criterion variable (school achievement, SD=0.871). Its value was 0.636 which points to the accuracy of the model of selected predictor variables.

Table 3. Results of regression analysis of specific areas of functional abilities with regard to students' school achievement (*n*=195)

Predictors	School achievement		
	R^2	*F*	β
Academic skills	.47	34.8*	.04
Attention			.29*
Communication			.25*
Class participation			.22
Behavior			.00

*$p > .05$.

Only two out of five variables were singled out as independent predictors. It was determined that only attention (p=0.011) and communication (p=0.045), as

specific functional areas, made a particular statistically significant contribution to the regression model (Table 3).

Only two variables (attention and communication) were singled out in the previous analysis. However, it was interesting to analyze individual contribution of each predictor variable, which was done by gradually introducing one by one into the given model using stepwise regression (Table 4).

Table 4. Results of semi-partial correlations of specific areas of functional abilities with regard to school achievement (n=195)

Predictors	School achievement	
	R^2	R^2 *change*
Attention	.43	.43*
Communication	.46	.03*
Class participation	.47	.00
Academic skills	.46	.00
Behavior	.46	.00

*$p > .01$.

The results shown in Table 4 indicate that it was important to perform stepwise regression analysis in order to determine individual contribution and significance of predictor variables to school achievement. This analysis also confirmed the previous result that only two predictor variables, attention and communication (receptive and expressive speech), made a significant individual contribution to school achievement. The results showed that attention contributed about 43% to the explanation of individual differences in school achievement, and that communication made an additional contribution of about 4%. Individual contribution of attention was highly statistically significant (p=0.000). Although communication contributed in small percentage to the explanation of the criterion variable variance, this contribution was statistically significant (p=0.000). The remaining three predictor variables (academic skills, class participation, and behavior) had no or a minimum effect on school achievement, which indicates that they should not be included in the given model (see Table 4).

Discussion

The results of this research lead to a conclusion that attention and communication are specific functional abilities which affect individual differences in school achievement and that they are the two most significant predictors in the analyzed model. It is possible that these functional abilities are somewhat

complementary and that they have a cascade effect on other functional abilities. However, in order to confirm this, it is necessary to conduct additional research aimed at examining these effects.

Other research studies also show that attention is one of the most significant independent predictors of school achievement (Biederman et al., 2004; Kessler et al., 2006). Fried et al. (2016) determined that 28% of children with attention deficit disorder repeated a grade, while in typical population this happened in 7% of cases. The results of this and similar research studies, which lead to a conclusion that attention difficulties are the main risk for school failure, have significant clinical and educational implications. Since the onset of attention deficit disorder is at preschool age (Wilens et al., 2002), and it is a treatable disorder, these findings should encourage professionals to help in identifying children with this disorder so that they could be included in intervention programs as early as possible. School failure affects not only an individual but also their family and wider social community, since it happens that the presence of a learning disabilities often leads to repeating a grade and/or dropping out of school. Educational difficulties, failure, and drop-out are connected to adverse reaction on the part of young. It has been proven that children with learning difficulties, who cannot follow teaching techniques get together with similar peers who have the same learning abilities and behavior. This increases the risk of marginalization and anti-social behavior. What is more important is that the wrong use of educational techniques forms a particular way of thought, characterized by lack of perspective, withdrawal, and school indifference (Giavrimis & Papanis, 2008).

Recent research studies indicate that particularly high school students drop out because of negative attitudes towards attending school, which is associated with symptoms that may indicate an undiagnosed attention deficit disorder (Bridgeland et al., 2006.). The authors further emphasize that early screening of this disorder at schools may be an important measure for preventing school failure and dropping out of school. The phenomenon of school non-attendance represents a significant issue for educators and mental health professionals (Carpentieri et al., 2022).

Numerous foreign and domestic research studies (Bess et al., 1986; Culbertson & Gilbert, 1986; Đoković et al., 2003; Klee & Davis-Dansky, 1986) show that attention, especially auditory, is important not only for speech and language development, but also for learning and thus for school achievement. The fact that students with minimum hearing impairment 10 times more frequently fail at school is a sufficient reason to pay attention to this problem (Bess et al., 1998).

It is well documented in the literature that minimum hearing impairment has a negative impact on children's functioning in various domains such as communication skills, academic achievement, and social behavior (Powers,

2003; Power & Hyde, 2002). Research has also shown that even children with a minimal or unilateral hearing loss face greater academic and social difficulties than children with normal hearing.

Most (2004, 2006) came up with interesting results using S.I.F.T.E.R. (Screening Instrument for Targeting Educational Risks) for examination of effects of the level of hearing loss on academic achievement in children attending regular schools. Although it was expected that children with unilateral and mild bilateral hearing loss would achieve better results or have better class participation than those with moderate and severe hearing loss, this was not the case. The children with greater level of hearing loss had better results on the following areas of S.I.F.T.E.R.: communication, participation, and total score. The reason for these unexpected results as pointed out by Kuppler, Lewis, and Evans (2013) can be found in the fact that the children with greater hearing loss had support in schools, used hearing aids, or were enrolled in programs of early auditory rehabilitation. Similar results were found in a study by Antia, Jones, Reed, and Kreimeyer (2009) which has shown that the level of hearing loss correlated with achievements in reading only and not in math, language, writing, or academic status. Authors conclude that this does not mean that the level of hearing loss does not affect academic achievement. The effects of the level of hearing loss can be clearly seen when the results of total academic achievement of children with hearing loss are compared with expected grade norms. Studies usually report underachievement. Conclusions based on the studies by Most (2006) and Antia, Jones, Reed, & Kreimeyer (2009) tell us that any level of hearing loss, even if mild, can lead to academic underachievement (Đoković et al., 2014).

The significance of communication (receptive and expressive speech) in school achievement is expected because it is indicated by a larger number of research studies (Law et al., 2000). Gibbs and Cooper (1989) state that about 90% of children who fail at school have speech and language difficulties. Many children start school with poor language skills (Norbury et al., 2016). Between 7% and 16% of children have less developed speech and language not explained by other developmental difficulties and lag behind the average for more than 1.5 standard units on tests related to certain chronological age (Reilly et al., 2010). Although language difficulties are evident when enrolling in school, nothing is usually done to overcome this problem (Beitchman et al., 1986; Law et al., 2008; Tomblin et al., 2003). Unlike preschool children in whom it is possible to take numerous measures to reduce or completely treat speech-language disorders, school-age children are at high risk of permanent language disorders and other academic difficulties.

It is very important to emphasize that children with learning disabilities are a heterogeneous population with large variability in symptomatology (Casey et al., 2014; Zhao & Castellanos, 2016). Currently, an increasing number of

authors emphasize that it is more useful to give up on research dealing with strictly defined deficits and turn to studying the mechanisms and dimensions of disabilities in a heterogeneous population at multiple levels (Cuthbert & Insel, 2013; Doherty & Owen, 2014; Holmes et al., 2019). By rejecting diagnostic categories, these authors emphasize that the aim is to understand and characterize (probably multiple) dimensions of difficulties for each child individually, and to select effective intervention programs. Comorbidity levels in various aspects of learning disabilities are high. It is estimated that reading disabilities occur together with disabilities in mathematics (Moll et al., 2014) or with speech-language disorders (McArthur et al., 2000) in about 50% of cases. Speech and language disorders most frequently occur as part of some other developmental disorders, such as attention deficit hyperactivity disorder (ADHD) (DuPaul et al., 2013), disharmonious development (Flapper & Schoemaker, 2013), dyslexia (Fraser et al., 2010), and social, emotional, and behavioral disorders (Lindsay & Dockrell, 2012; St Clair et al., 2011).

Conclusion

What is essential in determining and understanding the factors which lead to school failure is their early identification and taking actions to prevent academic difficulties. This would certainly contribute to alleviating the problem for children, their parents, teachers, school, and wider social community. To achieve that, it is necessary to take extensive actions at several levels. First of all, teachers must be trained to recognize the factors which lead to school failure, but they also need to be provided with simple, fast, and easy to implement tool for that purpose. The S.I.F.T.E.R. scale, primarily intended for identifying personal educational risks, was used in this research. This instrument has proved to meet some of the criteria expected from screening versions. First of all, it is easy to use and score, and it covers all functional abilities relevant to the educational process. Furthermore, the results of this scale clearly indicate whether a child is at educational risk, and if so, what type of support they need. However, this scale also has its limitation, which is focusing solely on personal factors of school failure, while it is a known fact that the causes of it are diverse. This means that it would be useful to design a more comprehensive unified protocol which would, in addition to personal factors, also recognize family and school factors of school failure.

Schools need to be well acquainted with the possibilities of additional support for this population of children, react timely, and access appropriate resources. It is estimated that about 15% of children have special needs in the learning process (Department for Education, 2017), which is certainly a significant number. The system of providing additional support for students in the regular education system is still not well developed in Serbia. Data obtained

from practice indicate the existence of differences with regard to which region the school belongs. It should also be emphasized that a very small percentage of special educators work as professional consultants in regular schools, which significantly hinders the process of providing additional support for the children who need it.

A large number of researches and experiences from practice indicate that teachers do not have enough competence to design adequate support. Difficulties in educational work in regular schools are also evident. In large departments, it is difficult to work with children who have disabilities under the IEP. Due to the increasing number of children with disabilities in regular schools, it is necessary to hire new and competent staff—special education teachers.

This research has certain limitations related to a relatively small sample stratified from three schools from the regular education system, and a relatively small number of teachers who participated as assessors. Also, the authors did not have an insight into whether the children had an identified and diagnosed disability or disorder at the preschool age, and whether they were included in some rehabilitation programs, which would certainly contribute to better interpretation of the obtained results. The limitation of this research is a relatively dated tool.

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Резиме

Постоји низ различитих личних и срединских фактора који могу утицати на школски успех и због тога их је потребно истражити са различитих аспеката. Разумевање фактора који утичу на школско постигнуће ученика представља

важан извор сазнања за стратешко планирање и подстицање промена у образовању. Досадашња истраживања идентификовала су велики број фактора релевантних за школски успех ученика и они су углавном покривени ширим категоријама, као што су: породица, школа и личне карактеристике ученика. Циљ истраживања био је да се утврди повезаност школског неуспеха са постигнућима у појединим функционалним способностима као што су: академске вештине (читање, писање), пажња, комуникација (рецептивни и експресивни говор), учествовање на часу и понашање. Узорак је чинило 195 деце оба пола, млађег основношколског узраста. Функционалне способности ученика процењиване су S.I.F.T.E.R. скалом (*Screening Instrument for Targeting Educational Risk* – Скрининг инструмент за откривање образовног ризика). S.I.F.T.E.R. скала даје веома поуздане податке и о другим функционалним карактеристикама ученика у процесу наставе (академске вештине, пажња, комуникација, учешће у настави и понашање) и представља добар инструмент за предвиђање могућег школског неуспеха. Резултати ове скале недвосмислено упућују на то да ли је дете уопште у образовном ризику, а ако јесте, упућује се на то који видови подршке су му потребни.

Резултати су показали да је школско постигнуће у корелацији са свим процењеним функционалним способностима. Коефицијент вишеструке детерминације показао је да се 48% индивидуалних разлика у школском неуспеху деце може објаснити индивидуалним разликама у понуђеном моделу функционалних способности. На основу резултата овог истраживања може се закључити да су пажња и комуникација два најважнија предиктора у анализираном моделу. Суштина откривања и разумевања фактора који доводе до школског неуспеха је у њиховом раном препознавању и предузимању активности које би спречиле академске тешкоће. Тиме би се, свакако, допринело пружању адекватне подршке како деци и њиховим породицама тако и наставницима, школи и широј друштвеној заједници. У Србији још увек није довољно добро разрађен систем пружања додатне подршке за ученике у редовном систему образовања. Веома мали проценат дефектолога ради на позицији стручног сарадника у редовним школама, што сигурно значајно отежава процес добијања додатне подршке за децу којој је то потребно.

Кључне речи: школско постигнуће; функционалне способности; деца млађег школског узраста; S.I.F.T.E.R. скала.