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Gifted Students with Disabilities

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Abstract

Gifted children with disabilities, or twice-exceptional students, differ from both gifted children and children with disabilities. Twice-exceptional students are students who show the potential for high achievement or creative productivity in one or more areas, and manifest one or more difficulties. The access to education and support that this group of children needs differs significantly from the approach and support that others need. This paper presents the results of research related to the characteristics, recognition and support for gifted students with learning disabilities, ADHD, and autism spectrum disorder.

Key words: *giftedness; gifted students with disabilities; disabilities.*

Introduction

For many years, difficulties and giftedness have been studied separately. But gifted children with disabilities are different from gifted children with no difficulties. They are also different from children with difficulties who are not gifted. Therefore, the access to education and support that this group of children needs differs significantly from the approach and support that others need.

As early as 1975, the Council for Exceptional Children (CEC), through the Talented and Gifted program (TAG), sought to raise public awareness of the existence of gifted students with disabilities (Nielsen, 2002).

The term "twice exceptional" first appeared in the works of Whitmore (1980, according to McCallum et al., 2013) and Maker (Udall & Maker, 1983, according to McCallum et al., 2013), and it referred to persons who are gifted but have certain difficulties at the same time. The National Commission on Twice-exceptional Students in the US provides the following definition (Reis et.al., 2014, p. 7): "Twice-exceptional students are those students who show the potential for high achievement or creative productivity in one or more areas such as mathematics, science, technology, social sciences, art, or other areas of human productivity, and who manifest one or more difficulties such as

learning disabilities, speech and language disorders, emotional/behavioural disorders, motor disorders, autism spectrum disorder (ASD), and ADHD. These difficulties and above-average abilities combine to form a unique student population that may not show high academic performance or specific difficulties. Twice-exceptional students require an individualized education plan (IEP) with goals and strategies that enable them achievements at a level commensurate with their abilities. This comprehensive education plan must include talent development goals as well as compensatory skills and strategies with respect to difficulties and social and emotional needs".

The aim of this paper is to present the results of research related to the characteristics, identification, and support of gifted students with learning disabilities, ADHD, and autism spectrum disorder, and give an overview of the education of gifted students with disabilities in Croatia. The review focuses on these students because they have been found to be the most difficult to identify and lack the necessary support in their education. Namely, giftedness can mask learning disabilities and conversely, learning disabilities can mask giftedness (Ruban & Reis, 2005). The same has been shown in studies on a population of students with ADHD disorder and autism spectrum disorder (Beljan et al., 2006; Burger-Veltmeijer, 2007). For this purpose, databases WOS, Scopus, EBSCO, CROSBI, HRČAK were searched. Different versions of the following keywords were used in the search: 'gifted', 'twice exceptional' in combination with 'learning disability', 'autism', 'autism spectrum', 'Asperger's' and 'ADHD'.

Giftedness

There have been many different definitions of giftedness throughout history and no consensus has yet been reached (Carman, 2013). Accordingly, there is no single method for assessing giftedness.

IQ tests are still the most common way of operationalization of giftedness. Accordingly, the creation of criteria for giftedness is an achievement measured by standardized values expressed in points. Most authors advocate a standardized value criterion above two standard deviations from the average (Baudson & Preckel, 2013), and some authors also cite a criterion of 120 to 140 score on an IQ test (Carman, 2013).

Some models of giftedness, the so-called models with multiple criteria, include multiple factors, creativity, motivation, and achievement (Krisel & Cowan, 1997). Renzulli's model, which became very popular in the US after the publication of the article, includes above-average intelligence, creativity, and commitment to the task (McBee & Makel, 2019). According to that model, gifted children are those who reach a certain level of ability, creativity, and commitment to the task in any of the 11 main areas (mathematics, philosophy, science, spirituality, literature, social sciences, fine arts, kinesiology, music) (Renzulli, 2005). The National Association for Gifted Children (NAGC) states that gifted students are those who achieve or are able to achieve greater achievements in one or more areas compared to others of the same age, experience, and environment (National Association for Gifted Children, 2010).

Inconsistency in the definitions of giftedness leads to methodological limitations in research and has implications in practice. Since the criteria for determining giftedness differ, we can conclude that some children will be diagnosed as gifted according to some criterion, while those same children will not be diagnosed as gifted according to another criterion which has consequences on education and overall development of those children.

The prevalence of giftedness is barely mentioned in papers dealing with the field of giftedness. The reason probably lies precisely in the different criteria for determining giftedness. According to the National Association for Gifted Children, the estimated prevalence of giftedness ranges between 6% and 10 % (National Association for Gifted Children, 2010).

Although giftedness does not only include cognitive abilities and there are sophisticated methods of observation (Sattler, 2008, according to McCallum et al., 2013) and assessment of creativity (e.g. Torrance Tests of Creative Thinking; Torrance, 1990, according to McCallum et al., 2013), IQ tests are still the most commonly used tool in assessing giftedness primarily because of good psychometric characteristics.

Gifted children often have difficulties during schooling. Some children are not recognized, and some, although recognized as gifted, do not have adequate access to education. Research shows that the gifted are paradoxically at risk for school failure, i.e., school achievements are often below their capabilities (Reis & McCoach, 2000), so they drop out of school (Renzulli & Park, 2002). The results of the Croatian research showed that gifted high school students are not more successful in school compared to their non-gifted peers (Kolić-Vehovec & Rončević, 2003). The authors assume that insufficient support and organization of the educational system and methods that do not stimulate the development of gifted students contribute to this result.

Uneven development, a common characteristic of the gifted, has negative implications for school success and socio-emotional well-being (Blaas, 2014). For example, students who have above-average cognitive abilities and average emotional development are less likely to socialize with peers and are often isolated (Silverman, 1998). While some studies have shown that gifted students often have perfectionism (Orange, 1997; Renzulli, 1998), others have found no difference in perfectionism compared to other students (Parker & Mills, 1996). Gifted students are often at risk for developing depression, anxiety, irritability, low self-esteem and error-avoidant behavior (Renzulli & Park, 2002).

In the Croatian study on a sample of 75 gifted seventh- and eighth-grade students from five elementary schools, the gifted students did not differ from the control group in depression, but there was a significant interaction of giftedness and school success: very successful gifted students were the least depressed, while less successful gifted students showed the highest degree of depression (Bumber et al., 2005).

Giftedness and learning disabilities

In the area of learning disabilities, there are many similarities with the area of giftedness. Learning disabilities are also defined differently; it is difficult to identify students with mild learning difficulties as the population is heterogeneous, and there are different developmental risks. The most complete definition of learning disabilities was given by the Learning Disabilities Association of Canada (2015): "Learning disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in people of average or above-average intelligence. Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing, phonological processing; visual spatial processing, processing speed, memory and attention, and executive functions."

According to the National Joint Committee on Learning Disabilities (NJCLD, 2011), the prevalence of learning disabilities is estimated at 20% of the population.

Students with learning disabilities often have working memory difficulties (Swanson & Ashbaker, 2000; Moll et al., 2016), information processing speed difficulties (Moll et al., 2016), and difficulties in self-regulated learning (Baird et al., 2009). Students with milder learning disabilities are often diagnosed only later in school and many remain undetected. Teachers and the environment often perceive them as lazy. If they do not receive adequate support during schooling, they are at risk of developing the so-called secondary difficulties such as anxiety (Cvitković, 2010; Nelson & Harwood, 2011), depression and loneliness (Maag & Reid, 2006), and decreased self-confidence and motivation to learn (Lackaye & Margalit, 2006). Many students with learning disabilities are exposed to frequent negative feedback from teachers and parents that adversely reflects on their self-esteem, contributes to low school achievement, and affects overall development (Hallahan et al., 2005).

If we look at the different approaches in defining and assessing giftedness and learning disabilities, it will be clear that there is no uniform definition that tells us which children with learning disabilities are gifted and which are not (Nicpon et al., 2011). It is also still not clear how this twice exceptionality is manifested and defined. The above-average abilities of these students can mask the difficulties they have, and the difficulties can mask the above-average abilities. Therefore, no strategy has yet been adopted to identify the gifted students with learning disabilities.

If we take an IQ as a measure of giftedness and set a criterion above which we define giftedness, it is possible, as we often see in practice, that children with learning disabilities, despite being gifted, will not meet this criterion due to their specific difficulty that causes them to score lower on some tests. Experts also warn about that (Lovett & Sparks, 2010). On the other hand, many gifted children with learning disabilities may mask the difficulty due to their cognitive abilities. Thus, they will have lower scores on some tests, but not so much as to conclude that it is a specific difficulty (Lovett &

Sparks, 2010). Lovett and Sparks (2010) report that the prevalence of those children is about 5%. We must handle this percentage with caution given the fact that many gifted children with learning disabilities are not diagnosed.

In practice, we have three groups of students (Baum, 1990): a) gifted with mild learning disabilities and no recognized disabilities, b) students with average achievement and no recognized giftedness nor disabilities, and c) students with learning disabilities with no recognized giftedness.

McCallum et al. (2013) propose the following method of identifying gifted students with learning disabilities. It includes measuring achievements in mathematics and the native language with standardized tests. High above-average results in one test and low in another would suggest the coexistence of disabilities and giftedness. In their work, they analyzed critical differences in achievement between language and mathematics that would suggest a specific difficulty in one area and giftedness in another. Although this method might identify students with reading disabilities or disabilities in mathematics, the authors point out that this would not identify students with other difficulties such as slowness in information processing. Also, it can be concluded that this method would not be possible to identify gifted students that have both reading difficulties and difficulties in mathematics.

Some authors also advocate an approach of observing intraindividual differences, as opposed to interindividual differences (Assouline et.al., 2010; Brody & Mills, 1997; Nielsen, 2002). Thus, for example, the ability of verbal comprehension may be well above average in some student, while the results of reading comprehension may be average. Although an average score was achieved on the reading comprehension test, this difference in achievement may indicate a gifted student with reading disabilities. One example of a case study illustrates this (Gilman et al., 2013). The case study included a girl aged 8.5 years with diagnosed dyslexia, difficulties in processing auditory information, and giftedness in mathematics. In the WISC-IV test, the results were above average in verbal comprehension and perceptual reasoning, average in the area of working memory, and the result in the area of information processing speed indicated a low average according to the limit values. Vocabulary tasks, auditory memory, visual-motor processing speed, and visual perception had the lowest scores. Reading and writing tests were worse compared to the expected above-average quotient of verbal comprehension on the WISC-IV scale. But the achievement on that test is not significantly below the achievement for age and it would not be included in the support program in the US schools.

Research has shown that lower scores on the encryption (information processing speed test) and working memory task are a strong indicator of the presence of difficulties in the gifted students (Waldron & Saphire, 1990; Assouline et al., 2010). In fact, Assouline et al. (2010) found that by relying on the overall score on the WISC test of intellectual ability (calculated based on full-scale scores) instead of the general ability index (GAI describes the cognitive functioning of higher-grade students without the

impact of working memory and information processing speed) many gifted children with learning disabilities may remain undiagnosed. Although scores on information processing speed and working memory tests are often lower in gifted students with learning difficulties, research results show that there is no uniform ability profile in gifted children with learning difficulties (Assouline et al., 2010).

In addition to the results on the IQ test, it is necessary to have valid measuring instruments that provide us with information about the strengths of students. Examples of such scales are 100 NIELSEN Scales for Rating the Behavioral Characteristics of Superior Students – Revised (Renzulli et al., 1997), Tests of Creative Thinking (Torrance, 1966), and Checklist of Creative Positives (Torrance, 1977).

Characteristics of gifted students with learning disabilities

Regarding cognitive characteristics, several case studies have been conducted that analyzed the profile of results on the WISC scale of intellectual abilities in gifted students with learning disabilities (Al-Hroub, 2011; Assouline et al., 2006; Gilman et al., 2013). A review of these works shows how gifted students with learning disabilities differ in scores on the WISC scale of intellectual abilities. What they have in common is an uneven profile of results: above-average abilities in one area and marginal results in another, while processing speed and working memory are marginal or below-average. Several studies have examined differences in WISC scale tests on smaller samples and the results are the same. Waldron and Saphire (1990) found differences between gifted students and gifted students with disabilities, and La France (1997) found differences between gifted students with dyslexia, gifted students, and students with dyslexia.

Given that metacognitive skills are more developed than average in gifted students and less developed in students with learning disabilities, the question arises about the development of metacognitive skills in gifted students with learning disabilities. Metacognitive skills are one of the key factors in learning success (Ristić Dedić, 2019).

Research that studied metacognitive skills in gifted students with learning disabilities mostly dates back to the 1990s. A review of the available databases found only one study in the last 20 years. A study by Hannah and Shore (1995) found that metacognitive knowledge and metacognitive skills, just like in gifted students, were higher in gifted students with disabilities than in average elementary school students, while no differences were found in high school age. The authors explain that it is possible that the tests were not sensitive enough at a later age, but it is possible that the differences in metacognitive skills decrease with maturation. One qualitative study found that gifted students with disabilities are not as successful at using metacognitive strategies as gifted students without disabilities (Montague, 1991). Recent research (Hannah & Shore, 2008) examined the skill of monitoring reading comprehension in 12 boys. Older high school students were found to be active in monitoring reading comprehension as opposed to younger primary school students who were less active (Hannah & Shore,

2008). The results of these surveys cannot be generalized because the samples are small and limited to only a few schools.

A system that does not recognize giftedness, disabilities, or both in students and does not provide the support that a student needs, may lead to a number of so-called secondary difficulties. Baum and Owen (1988) conducted one of the first studies in this area. A stronger sense of inefficiency was what gifted students had in common with students with and without disabilities. Gifted students with learning disabilities have a high creative potential, but also a tendency for undesirable behaviors and lower school achievement. Research shows that gifted students with learning disabilities, similar to students with learning disabilities of average intelligence, face negative experiences that can lead to frustration, depression, feeling of uselessness, reduced self-esteem and aggression (Nicpon, 2011; Hua, 2002), and suicidal thoughts (Gilman et al., 2013). A qualitative US study (Reis et al., 1997) involving twelve gifted students with learning disabilities identified two key categories: negative school experience and compensatory strategies necessary to achieve school success. Most participants were diagnosed in high school or college. They mentioned various negative experiences, punishments by teachers and parents, and cruel behaviour of teachers and peers. Some were even placed in special classes for children with intellectual disabilities and behavioural problems. Teachers would interpret their specific skills and talents as proof that they were essentially lazy or careless. They all had positive experiences outside of school that helped them survive that period and succeed later in their studies. They had to develop compensatory strategies in order to succeed (e.g., listening to sound recordings instead of reading, self-representation, etc.) and learn various cognitive and metacognitive learning strategies. All of them reported the importance of supporting parents who believed in them and enrolled them in various after-school programs. They chose a study that suited their talents and did not require as much work with skills they had difficulties with. Reis and Colbert (2004) repeated the research a few years later on a sample of 15 students and obtained almost the same results. Due to emotional difficulties, half of the students had to go to psychological counselling after graduating from high school.

By doing a systematic review of 23 studies dealing with this area, authors Beckmann and Minnaert (2018) concluded that most gifted students with learning disabilities share a high level of negative emotions, low self-esteem, frustration with school, and relationship difficulties. On the other hand, they have a high level of intrinsic motivation and have developed various coping strategies and stress resilience. In addition to the positive personality traits mentioned in their work (Beckmann & Minnaert, 2018), one study found that gifted students with dyslexia are creative and have a more pronounced sense of humor like other gifted students, as opposed to average students with dyslexia (La France, 1997).

Compensatory strategies are necessary for these students to achieve success. One study, although with a sample of only 42 children, indicates that gifted students with

learning disabilities use more positive strategies when coping with stress and frustration they face in school than children with learning disabilities (Coleman, 1992).

Gifted students with ADHD

ADHD or attention deficit hyperactivity disorder is a neurodevelopmental disorder characterized by a persistent pattern of inattention and/or hyperactivity and impulsivity of such intensity that it significantly affects the functioning and development of the individual (American Psychiatric Association, 2013). ADHD is relatively well operationalized according to the DSM-V Handbook of the American Psychiatric Association (2013) which states that a child must have six or more symptoms and an adult five or more symptoms of inattention and/or hyperactivity or impulsivity that are inconsistent with the individual's developmental level that have a significant adverse effect on functioning, lasting at least six months. Those symptoms do not stem from oppositional, protest behaviour, defiance, hostility, or lack of understanding tasks/instructions.

People with ADHD have difficulties with executive functions (planning, organization, self-regulation, inhibition, etc.) which can have adverse consequences in relationships with peers, teachers, and family members (Dumas, 1998). Like students with learning disabilities, students with ADHD often have difficulties in school and lower school achievement (Daley & Birchwood, 2010).

It is estimated that about 10 % of people with ADHD are gifted (Antshel et al., 2007; Chae et al., 2003). The assessment of gifted people with ADHD is particularly complex since some symptoms of ADHD are similar to behavioural characteristics of gifted children (Kalbfleisch & Iguchi, 2007; Nelson et al., 2006). The attention of the gifted is not focused on the content which does not interest them; often when something is boring and insufficiently stimulating, they can "wander" with their thoughts (Webb et al., 2005). Gifted people also have difficulty sitting still, waiting in line, and generally have more energy, as do children with ADHD, and the chance of misdiagnosis is high (Hartnett et al., 2004; Webb & Latimer, 1993; Webb et al., 2005).

Although there seems to be a similarity in the behaviour of the gifted and children with ADHD, the observation of behaviour shows that, for example, inattention in gifted students is situation-specific, while there are continuous difficulties with attention in students with ADHD. High activity in gifted people is generally focused and goal-oriented, whereas hyperactivity in children with ADHD is often random and not goal-oriented (Leroux & Levitt-Perlman, 2000).

In gifted students with ADHD, ADHD symptoms and talents can mask each other (Ruban & Reis, 2005a). Gifted students with ADHD have better results on attention tests, e.g. on TOVA (Chae Ji-Hye & Kyung-Sun, 2003), Brickenkamp's d2 and Conners´ Continuous Performance Test CPTII (Benito & Guerra, 2012), compared to students with ADHD of average intelligence, and worse results compared to gifted students without ADHD. They usually have only one diagnosis or are diagnosed only later in school

(Kalbfleisch & Iguchi, 2007; Ruban & Reis, 2005a), while many remain undiagnosed (Moon, 2002). It is also possible that some students receive a misdiagnosis, such as a diagnosis of ADHD, while actually being gifted (Hartnett et al., 2004). Unfortunately, they may even be prescribed drug therapy instead of planning educational support.

Characteristics of gifted students with ADHD

Research has shown that gifted students with ADHD on average have lower scores in measuring attention and verbal working memory compared to gifted students without ADHD, and higher scores than students with ADHD of average intelligence (Benito & Guerra, 2012; Whitaker et al., 2015). Gifted students with ADHD have also been shown to have difficulties in executive functions, such as planning and organization, difficulties with verbal memory (Dillon et al., 2013), and symptoms of inattention and impulsivity (Chae et al., 2003; Mahone et al., 2002). However, those difficulties are less pronounced compared to students with ADHD of average intelligence.

ADHD is associated with difficulties in executive functions for which the prefrontal lobe is in charge. Because the gifted are superior in executive functions, it is assumed that the problem with attention in the gifted with ADHD is more related to the posterior part of the cortex and leads to difficulties with sensory integration and integration of information related to emotions (Sousa, 2003, according to Wood, 2012). One study found that gifted boys with ADHD had even more difficulties in social interactions and emotional difficulties compared to boys with only ADHD or those who are only gifted (Moon et al., 2001).

Gifted students with ADHD also need support during schooling. Secondary difficulties arise in the absence of support. Several studies (Anshtel et al., 2007; Zentall et al., 2001) found that gifted students with ADHD were more likely to repeat the grade or had lower grades compared to gifted children without ADHD. They also had a number of emotional difficulties, mood disorders, anxiety, behavioural disorders, peer relationship difficulties, stress in the family (Zentall et al., 2001), and lower self-esteem, and achieved lower scores in measuring feelings of happiness and satisfaction compared to gifted children without ADHD (Foley-Nicpo et al., 2012).

Gifted students with ADHD, on the other hand, have exceptional abilities that should be encouraged during schooling. Research shows that gifted students with ADHD have a unique ability to connect seemingly unrelated phenomena and the ability to hyperfocus, can be focused on one thing for a long time (Wood, 2012) and are more creative than the gifted without ADHD (Fugate et al., 2013).

Gifted students with autism spectrum disorder

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by differences in social communication and interaction, and atypicality in characteristics of general behaviour and interest (APA, 2015). At the same time, it can affect a large number of development areas in different ways, which results in a great diversity of

development profiles and outcomes (Cepanec et al., 2015). Recent research indicates that the prevalence of this disorder is 1 to 54 (Maenner et al., 2020), making it one of the most common developmental disorders.

When talking about autism spectrum disorder, it is important to distinguish savant skills from giftedness that are often associated with this population. Savant skills are related to people who, despite greater intellectual disabilities, have highly developed skills in a specific area. These skills can be in mathematics (calculations of dates, primary numbers, and speed in arithmetic skills), music (playing complex sequences after just one listening), art (complex scenes with accurate perspectives that a person reproduces after a very short observation), and very good memory of specific places, dates, routes, or facts (Howlin, 2012). In this paper, the focus is on giftedness as described in the introduction, i.e., it will include research related to gifted children with autism spectrum disorder who do not have intellectual disabilities.

Charman et al. (2014) state that the prevalence of intellectually gifted in the population of students with ASD is 3%, while 55% of those students have intellectual disabilities. The study which included a larger sample of schools (a total of 319,469 participants) and examined four types of giftedness - intellectual, academic, artistic, and creative - obtained the same percentage of gifted students with ASD - 3.3% (Karnes & Shaunessy, 2004).

Again, it is important to emphasize that data should be taken with caution given the different definitions of giftedness and the difficulties that arise in identifying gifted people with ASD. Those difficulties stem from several sources. Many characteristics attributed to giftedness are similar to the characteristics of ASD (e.g. difficulties in social interaction, social isolation, good memory, focus, etc.). Furthermore, giftedness can mask and compensate for some difficulties arising from ASD, but ASD can also mask giftedness due to the aforementioned reasons. Finally, it is not possible to make a clear cut between giftedness and ASD (Burger-Veltmeijer, 2006). Detection is also difficult because professionals are educated on either giftedness or ASD rather than both (Henderson, 2001; Foley-Nicpon et al., 2013).

The Global Ability Index should be considered instead of the Full Scale IQ (FSIQ) when assessing students with ASD. When there is a great variability and when higher-order thinking skills (problem solving) are significantly different from lower-order thinking skills, FSIQ is suppressed by the scores for lower orders skills - auditory working memory, cognitive processing, or visual scanning. This can have a negative effect on gifted students and they may be misperceived as average (Foley–Nicpon et al., 2012).

Characteristics of gifted students with autism spectrum disorder

Gifted students with ASD have very high general cognitive ability and above-average ability of verbal and/or perceptual reasoning and differ from gifted students without difficulties in the areas of information processing speed, working memory, adaptive and

psychosocial functioning, and social skills (Doobay, 2010; Nicpon et al., 2010; Foley-Nicpon et al., 2012). Furthermore, those students use mental health and medications more than non-gifted students with ASD (Cain et al., 2019).

Cain et al. (2019) compared the academic achievements of gifted and non-gifted students with ASD. They included 696 students with ASD in their study. Both groups achieved higher results on lower-order academic skills (calculation and identification of letters and words) and lower scores on higher-order skills (applied problems). Working memory and information processing speed have been shown to be predictors of academic success in the gifted with ASD (in reading, writing, and math) (Assouline et al., 2012). However, these are also areas in which those students scored lower than in the areas of verbal and nonverbal skills (Foley-Nicpon et al., 2012). This suggests that difficulties in retaining information in auditory working memory and rapid information processing in students with high verbal and nonverbal IQs could have a negative effect on the academic success of students with ASD (Assouline et al., 2012). A study by Assouline et al. (2012) has shown that fine motor skills are related to achievements in mathematics.

One longitudinal study has shown a difference in academic achievement between the gifted and non-gifted with ASD that is present from an early age; gifted students achieve higher scores over time and non-gifted students achieve lower scores than their typically developing peers (Cain et al., 2019). It was also found that the percentage of gifted students in the sample decreased over time. The authors reasoned about the inadequacy of the school system in encouraging those children and the limitation of the very definition and measurement of giftedness at different ages (Cain et al., 2019).

In a study by Nicpon et al. (2012), parents, teachers, and gifted children with ASD filled out the Behavior Assessment Scale for Children. Parental assessments indicated clinically significant results on subscales of behavioural atypicality, attention problems, depression, hyperactivity, withdrawal, adaptability, and social skills, and expert assessments were given on subscales of behavioural atypicality, depression, withdrawal, and adaptability. The students' self-assessment indicated average results. Interestingly, parents and teachers reported increased adaptability in adolescents and decreased atypicality with maturation, and a similar trend of better adaptation with maturation has been obtained in other studies of children and adolescents with autism spectrum disorder (Barnhill et al., 2000).

Support for gifted students with disabilities

If one searches for research that has addressed the support for gifted students with disabilities, one finds that it is largely research from the United States that addresses their education. This chapter presents the research obtained by searching research databases, and the next chapter presents an overview of the support for gifted students in Croatia.

Many teachers and professionals, with the best of intentions, neglect the student's strengths and talents when taking care of student's difficulties. Most authors agree that

in approaching gifted students with disabilities, giftedness should be encouraged with an emphasis on their gifted areas. Research shows that gifted students with disabilities perform much better in school if more attention is paid to their giftedness during education, while reducing the focus on difficulties (Olenchak, 2009; Nielsen, 2002).

A qualitative study (Willard-Holt et al., 2013) asked gifted students with disabilities about learning and teaching strategies. The students noticed that their overall school experiences did not help them realize their potential, although they had learned to use their strengths to get around their weaknesses. Implications for teachers included giving twice-exceptional students more freedom in learning and more choices and flexibility in choosing topics, learning methods, pace, and collaborating with others (Willard-Holt et al., 2013).

A study shows the situation with Individualized Education (IEP) Program in the US (Crim et al., 2008). Out of 112 surveyed elementary-school gifted children with disabilities, there were no records in the IEP that any child had received support in the form of a gifted program. Those children also received fewer adjustments than other children with learning disabilities.

Previous research has shown that most gifted students with ASD are not included in the gifted student programs (Cain et al., 2019; Huber, 2007), despite the fact that involvement in talented and gifted programs is predictive of academic success, e.g. in mathematics (Assouline et al., 2012).

Unfortunately, most teachers do not have enough knowledge to apply interventions or adjustments that will take into account both giftedness and difficulties of students, nor to identify twice-exceptional students (Assouline & Whiteman, 2011). Experts are educated either in the area of giftedness or in the area of disabilities or special education, and few have experience and knowledge related to twice exceptionality (Foley-Nicpon et al., 2013). The experiences of parents of students with ASD indicate that they had to fight for social and academic support for their children within a school environment that lacked sufficient expertise or flexibility to respond to needs arising from difficulties or giftedness (Rubenstein & Wilczynski, 2015).

The US has been carrying out the so-called Schoolwide Enrichment Model for gifted students since 1970s (Renzulli & Renzulli, 2010). It is a highly structured program with an emphasis on personalized support. The goal is to encourage giftedness in an environment that leads to the enjoyment of learning and engagement, and enthusiasm for learning. The program includes encouraging creative thinking, problem solving, critical thinking, and various learning strategies (Renzulli & Renzulli, 2010).

Olenchak (1995) investigated the effect of this program on gifted students with learning disabilities. After a year of carrying out this program, gifted students with disabilities had a better attitude towards school, a better image of themselves, and were more successful in creative thinking.

In addition to the importance of focusing on the interests and areas in which students with disabilities are gifted, the emphasis is placed on teaching self-regulation strategies

and the so-called compensatory strategies (for reading, writing, comprehension, mathematical thinking) for those areas where students have difficulties (Moon & Reis, 2004). Assessment in which students solve real problems in areas of their interest is also important for students with ASD (Bianco et al., 2009). One of such programs for identification, stimulation of cognitive abilities, and teaching of compensatory skills is the so-called Talents Unlimited Program (Schlichter & Palmer, 1993). Research findings on the application of this program in working with gifted students with learning disabilities indicate that the program results in a better attitude towards school and greater self-confidence (Olenchak, 2009).

Special attention should be paid to gifted students with highly developed spatial abilities and difficulties in verbal processing. The traditional way of teaching based on verbal information, present most often in the USA, but also in Croatia, is the least suitable one for those students. With the potential to become engineers, architects or innovators, many of them stay undereducated and underemployed (Humphreys et al., 1993). Those students will progress if an interdisciplinary approach to teaching is used which will allow them to relate how changes in one area affect another area. In teaching, one should keep in mind the qualitative style of thinking in this group of students, i.e., working from the whole to the parts and teaching through projects and experiments (Mann, 2006). In contrast, teaching strategies involving learning by heart, lots of reading, and written instruction have been shown to be ineffective for students gifted in spatial skills, but with difficulties in verbal processing (Weinfeld et al., 2002).

In their paper, Bianco et al. (2009) describe a strength-based program for students with ASD. They emphasize the importance of taking into account what is called a special interest in people with ASD in order to take advantage of student motivation. They further describe the involvement of a mentor who is an expert in a specific area of interest to students, which can be achieved through the already established International Telementor Program in the US or some other less formal contact. Finally, they state the importance of using adaptations that involve the student's interest and rely on their strengths (e.g. visual learning, focus on detail) and the collaboration of teachers, special education professionals, and parents.

Baum et al. (2001) tried to summarize adjustments in teaching with regard to the needs of gifted students with disabilities: alternative ways of presenting and accessing information, alternative ways of expressing ideas and performing tasks, curriculum based on students' interests and talents, creating opportunities for socializing with students of the same abilities and interests, and achievement recognition.

Gifted students with disabilities in Croatia

The website of the Ministry of Science and Education provides very general guidance on gifted education in a nutshell (MZO, n.d.). In addition to the basic laws on education, there are outdated regulations for gifted students (NN, 34/91) and newer regulations for students with disabilities (NN, 24/15).

In their review article, authors Zrilić and Marin (2017) mention the draft of a new set of rules for gifted students, which is in process and unfortunately not yet in force. They emphasize the importance of systematic support for these students and their right to appropriate programs. They also describe various opportunities for these students provided for in the draft of new regulations, such as the provision of a mentor to monitor and evaluate the student's work and progress, the organization of school teams to carry out the process of working with gifted stduents and evaluate their progress, the establishment of the program of work, and the provision of professional support for the gifted student, teachers, and parents. It is further envisaged that school founders may organize centers of excellence for several schools in their area, where special forms of work for gifted students would be implemented (Zrilić & Marin, 2017). Authors Zrilić and Marin (2017) conclude that despite regulations, gifted students are often not recognized in practice, teachers do not promote their diversity, do not enrich programs, and often ignore students' giftedness. This conclusion is supported by the findings of the Croatian research mentioned earlier, which found that gifted high school students are not more successful in school compared to their non-gifted peers (Kolić-Vehovec & Rončević, 2003).

It is stated in The Regulations on Elementary and Secondary Education of Students with Disabilities (NN, 24/15) that program of support for students with disabilities includes various types of appropriate educational programs, supplementary educational and rehabilitation programs, and temporary forms of education, as well as education conducted in schools and other public institutions that carry out the activity of education. Despite legally secured support, research and practice show, as in the case of gifted students, that many students with disabilities do not receive sufficient support (Sekušak-Galešev et al., 2015; Kudek Mirošević & Opić, 2011).

In Croatian scientific literature, there are no reviews or research papers on the topic of gifted students with disabilities. Laws and regulations do not define either the forms of support for students who are both gifted and have learning difficulties, and we can assume that the regulations for the gifted as well as the regulations for students with disabilities would apply to these students. For example, the Primary and Secondary Education Act (NN 87/2008) states that pupils with special educational needs are pupils with disabilities and gifted pupils. It is stated that for this group of pupils, differences in the objectives, i.e., expected achievements, content and methods of learning and teaching are necessary according to their individual abilities and peculiarities.

The only documents that mention gifted students with disabilities are the National Framework Curriculum for Preschool Education and General Compulsory and Secondary Education (NQF, MZO, 2010), in which they are listed as students with dual special needs, and in documents produced as part of the comprehensive curriculum reform - the Framework for Promoting and Adapting Learning Experiences and Assessing the Achievement of Children and Students with Disabilities (MZO, 2017) and the Framework for Encouraging Learning Experiences and Assessing the Achievement

of Gifted Children and Students (MZO, 2017). These documents state that special attention should be given to these students, who often go unrecognized.

The opinion of the authors is that most experts in the field of education do not even know about the existence of this group of students, and we are somehow still at the beginning of supporting the so-called twice-exceptional students. Gifted students with disabilities are not defined as a special group in laws and regulations related to education; a search in the databases revealed research on gifted students as well as on students with disabilities, but no Croatian research was found on students who have difficulties, in addition to giftedness. Similarly, the authors' clinical experience indicates a lack of support for these students in education. A systematic action plan for gifted students with disabilities needs to be developed, from raising awareness of the existence of this group of students to recognition and support based on research and professional experience.

Conclusion

Support for gifted students with disabilities is still insufficient, and the reasons lie in the inconsistency of the definition, and thus the way of assessing giftedness, disabilities, and assessing the combination of giftedness and disabilities. Delays in assessment or lack of assessment adversely affect the development of these twice-exceptional students. Unfavorable development is reflected in the presence of the so-called secondary difficulties, frustration, depression, feelings of uselessness, decreased self-esteem, aggression (Nicpon, 2011; Hua, 2002), and suicidal thoughts (Gilman et al., 2013). Clear, precise, uniform definitions would enable methodologically stronger research and faster development of knowledge in this area. We are only at the beginning in Croatia. Awareness of the existence of the so-called twice-exceptional students and scientific research on the position of these students in the education system is the first step towards planning and introducing systematic support.

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Daroviti učenici s teškoćama

Sažetak

Darovita djeca s teškoćama odnosno dvostruko izuzetni učenici razlikuju se i od darovite djece i od djece s teškoćama. Dvostruko izuzetni učenici su oni učenici koji pokazuju potencijal za visoka dostignuća ili kreativnu produktivnost u jednom ili više područja te također očituju jednu ili više teškoća. Pristup obrazovanju i podrška koju treba ova skupina djece bitno se razlikuje od pristupa i podrške koju trebaju ostali. U ovom su radu prikazani rezultati istraživanja koji se odnose na karakteristike, prepoznavanje i pružanje podrške darovitim učenicima s teškoćama učenja, ADHD poremećajem i poremećajem iz spektra autizma.

Ključne riječi*: daroviti učenici s teškoćama; darovitost; teškoće*

Uvod

Dugi niz godina teškoće su se proučavale odvojeno kao i darovitost. No, djeca s teškoćama koja su istovremeno darovita razlikuju se od djece koja su darovita i nemaju teškoće. Isto tako, razlikuju se od djece koja nisu darovita i imaju teškoće. Samim time pristup obrazovanju i podrška koju treba ova skupina djece bitno se razlikuje od pristupa i podrške koju trebaju ostali.

Već 1975., Vijeće za izvanrednu djecu (CEC), kroz Udruženje za nadarene (TAG), nastojalo je podići svijest javnosti o postojanju darovitih učenika s teškoćama (Nielsen, 2002). Naziv „Twice exceptional" prvi put se pojavljuje u radovima Whitmorea (1980, prema McCallumi sur., 2013) i Makera (Udall i Maker, 1983, prema McCallum i sur., 2013) i označavao je one osobe koje su darovite, ali istovremeno imaju i određene teškoće.

Nacionalno povjerenstvo za dvostruko izuzetne učenike („Twice Exceptional Students") u SAD-u daje sljedeću definiciju (Reis i sur., 2014, str. 7): „Dvostruko izuzetni učenici su oni učenici koji pokazuju potencijal za visoka dostignuća ili kreativnu produktivnost u jednom ili više područja kao što su matematika, znanost, tehnologija, društvene znanosti, umjetnost ili druga područja ljudske produktivnosti i koji očituju jednu ili više poteškoća kao što su teškoće učenja; poremećaj govora i jezika; emocionalni / ponašajni poremećaji; motorički poremećaji; poremećaj iz spektra autizma (PSA), ADHD. Ove teškoće i iznadprosječne sposobnosti kombiniraju se tako da čine jedinstvenu populaciju učenika koja možda ne pokazuje visok akademski učinak ili specifične poteškoće. Dvostruko izuzetni učenici zahtijevaju individualni odgojno-obrazovni plan (IOOP) s ciljevima i strategijama koji im omogućuju postizanje na

razini razmjerno njihovim sposobnostima. Ovaj sveobuhvatni obrazovni plan mora sadržavati ciljeve razvoja talenta, kao i kompenzacijske vještine i strategije s obzirom na poteškoće te socijalne i emocionalne potrebe".

Cilj je ovoga rada prikazati rezultate istraživanja vezanih za karakteristike, identificiranje i pružanje podrške darovitim učenicima s teškoćama učenja, ADHD poremećajem i poremećajem iz spektra autizma te dati osvrt na obrazovanje darovitih učenika s teškoćama u Hrvatskoj. Pregled je usmjeren baš na te učenike jer se pokazalo da je njih najteže identificirati te da i samim time izostaje potrebna podrška u njihovu obrazovanju. Naime, darovitost može maskirati teškoće učenja i obrnuto, teškoće učenja mogu maskirati darovitost (Ruban i Reis, 2005). Isto se pokazalo i kod istraživanja na populaciji učenika s ADHD poremećajem i poremećajem iz spektra autizma (Beljan i sur., 2006; Burger-Veltmeijer, 2007). U tu svrhu pretražene su baze WOS, Scopus, EBSCO, CROSBI, Hrčak. U pretraživanju su se koristile različite inačice sljedećih ključnih riječi: „gifted", „twice exceptional" u kombinaciji s „learning disabilities", „autism", „autism spectrum", „Asperger" i „ADHD". Izdvojena su znanstvena istraživanja bez obzira na datum publiciranja koja su uključivala sudionike koji su opisani kao nadareni s jednom od navedenih teškoća.

Darovitost

U povijesti je bilo mnogo različitih definicija darovitosti i još nije postignut konsenzus (Carman, 2013). U skladu s tim ne postoji ni jedinstvena metoda procjene darovitosti.

Još uvijek je najučestaliji način operacionalizacije darovitosti pomoću testova inteligencije. U skladu s tim, kriteriji za darovitost je postignuće mjereno standardiziranim vrijednostima, izraženo bodovima. Većina autora zastupa kriterij standardizirane vrijednosti iznad dvije standardne devijacije od prosjeka (Baudson i Preckel, 2013), a neki autori navode i kriterij 120 do 140 bodova na testu inteligencije (Carman, 2013).

Neki modeli darovitosti, tzv. modeli višestrukih kriterija, uključuju više čimbenika, kreativnost, motivaciju te postignuće (Krisel i Cowan, 1997). Renzullijev model, koji je nakon objavljivanja njegova članka postao jako popularan u SAD-u uključuje iznadprosječnu inteligenciju, kreativnost i posvećenost zadatku (McBee i Makel, 2019). Prema tom modelu darovita djeca su ona koja dostižu određenu razinu sposobnosti, kreativnosti i posvećenosti zadatku u bilo kojem od 11 glavnih područja (matematika, filozofija, prirodne znanosti, duhovnost, književnost, društvene znanosti, likovna umjetnost, kineziologija, muzika) (Renzulli, 2005). Nacionalno udruženje za darovitu djecu SAD-a (NAGC) navodi kako su daroviti učenici oni koji postižu ili su sposobni postizati veća postignuća u jednom ili više područja) u usporedbi s drugima iste dobi, istoga iskustva i okruženja (National Association for Gifted Children, 2010).

Neujednačenost u definicijama darovitosti dovodi do metodoloških ograničenja u istraživanjima te ima implikacije u praksi. Budući da se kriteriji utvrđivanja darovitosti razlikuju, možemo zaključiti kako će prema nekom kriteriju neka djeca

biti dijagnosticirana kao darovita dok ta ista djeca prema drugom kriteriju neće dobiti dijagnozu darovitosti što ima posljedice na obrazovanje i cjelokupni razvoj te djece.

Prevalencija darovitosti gotovo se uopće ne spominje u radovima koji se bave područjem darovitosti. Razlog vjerojatno leži upravo u različitim kriterijima određivanja darovitosti. Prema nacionalnom udruženju SAD-a za darovite, procjena prevalencije darovitosti kreće se između 6 do 10 % (National Association for Gifted Children, 2010).

Iako darovitost ne uključuje samo kognitivne sposobnosti te postoje sofisticirane metode opažanja (Sattler, 2008, prema McCallum i sur., 2013) i procjene kreativnosti (npr. Torrance Tests of Creative Thinking; Torrance, 1990, prema McCallum i sur., 2013) i dalje su testovi inteligencije najčešće korišteni u procjeni darovitosti prvenstveno zbog dobrih psihometrijskih karakteristika.

Darovita djeca često imaju poteškoća tijekom školovanja. Neka djeca i nisu prepoznata, a neka, iako prepoznata kao darovita, nemaju primjeren pristup obrazovanju. Istraživanja pokazuju da su daroviti paradoksalno u riziku za školski neuspjeh, odnosno postignuća u školi često su ispod njihovih mogućnosti (Reis i McCoach, 2000) te napuštaju školu (Renzulli i Park, 2002). Rezultati hrvatskoga istraživanja pokazali su kako daroviti gimnazijalci nisu uspješniji u školi u odnosu na vršnjake koji nisu daroviti (Kolić-Vehovec i Rončević, 2003). Autorice pretpostavljaju kako ovakvom rezultatu pridonose neadekvatna podrška i organizacija obrazovnoga sustava te metode koje ne stimuliraju razvoj darovitih učenika.

Neujednačeni razvoj, česta karakteristika darovitih, ima negativne implikacije na školski uspjeh i socioemocionalnu dobrobit (Blaas, 2014). Učenici koji, primjerice, imaju iznadprosječne kognitivne sposobnosti, a emocionalni razvoj je prosječan, rjeđe se druže vršnjacima i često su izolirani (Silverman, 1998). Dok se u nekim istraživanjima pokazalo kako je kod darovitih učenika često prisutan perfekcionizam (Orange, 1997, Renzulli, 1998), u drugim nije utvrđena razlika u perfekcionizmu u odnosu na ostale učenike (Parker i Mills, 1996). Daroviti učenici često su u riziku za razvoj depresije, anksioznosti, iritabilnosti, sniženoga samopouzdanja i ponašanja usmjerenog na izbjegavanje grešaka (Renzulli i Park, 2002). U hrvatskom istraživanju, na uzorku od 75 darovitih učenika, sedmih i osmih razreda 5 osnovnih škola, daroviti učenici nisu se razlikovali od kontrolne skupine po svojoj depresivnosti, ali je postojala značajna interakcija darovitosti i školskoga uspjeha: najmanje depresivni bili su vrlo uspješni daroviti učenici, dok su najviši stupanj depresivnosti pokazali manje uspješni daroviti učenici (Bumber i sur., 2005).

Darovitost i teškoće učenja

Na području teškoća učenja postoje mnoge sličnosti s područjem darovitosti. Teškoće učenja (engl. *learning disabilities*) se također različito definiraju, otežano je prepoznavanje učenika s blažim teškoćama učenja, populacija je heterogena te postoje različiti razvojni rizici. Najpotpuniju definiciju teškoća učenja dalo je Kanadsko udruženje za teškoće učenja (Learning Disabilities Association of Canada, 2015): „Teškoće učenja odnose se na brojne poremećaje koji mogu utjecati na primanje, organizaciju, pamćenje,

razumijevanje ili uporabu verbalnih i neverbalnih informacija. Ti poremećaji utječu na učenje kod osoba prosječne ili iznadprosječne inteligencije. Teškoće učenja rezultat su oštećenja u jednom ili više procesa vezanih za percepciju, mišljenje, pamćenje ili učenje. To uključuje, ali nije ograničeno na: jezično, fonološko, vidno-spacijalno procesiranje, brzinu procesirana informacija, pažnju, pamćenje i izvršne funkcije."

Prema Nacionalnom udruženju teškoća učenja SAD-a (National Joint Committee on Learning Disabilities) (NJCLD, 2011), prevalencija teškoća učenja procjenjuje se na 20 % populacije.

Učenici s teškoćama učenja često imaju poteškoće radnoga pamćenja (Swanson i Ashbaker, 2000; Moll i sur., 2016), brzine obrade informacija (Moll i sur., 2016) i poteškoće u samoregulaciji učenja (Baird i sur., 2009). Učenicima s blažim teškoćama učenja često tek kasnije tijekom školovanja bude postavljena dijagnoza, a mnogi ostanu i neotkriveni. Često ih učitelji i okolina percipira kao lijene učenike. Ako ne dobiju primjerenu podršku tijekom školovanja, u riziku su za razvoj tzv. sekundarnih teškoća poput anksioznosti (Cvitković, 2010; Nelson i Harwood, 2011), depresije i usamljenosti (Maag i Reid, 2006) te smanjenoga samopouzdanja i motivacije za učenje (Lackaye i Margalit, 2006). Mnogi učenici s teškoćama učenja izloženi su čestim negativnim povratnim informacijama od strane učitelja i roditelja što se nepovoljno reflektira na samopouzdanje, doprinosi niskom školskom postignuću i utječe na cjelokupni razvoj ovih učenika (Hallahan i sur., 2005).

Ako se osvrnemo na različite pristupe u definiranju i procjeni darovitosti kao i teškoća učenja, bit će nam jasno kako ne postoji jednoznačna definicija koja bi nam govorila o tome koja djeca s teškoćama učenja jesu, a koja nisu darovita (Foley-Nicpon i sur., 2011). Također još uvijek nije jasno kako se ta dvostruka izuzetnost manifestira i definira. Iznadprosječne sposobnosti ovih učenika mogu maskirati teškoće koje imaju, a s druge strane teškoće mogu prikriti iznadprosječne sposobnosti. Stoga, još uvijek nema usvojene strategije za identificiranje darovitih s teškoćama učenja.

Ako se kvocijent inteligencije uzme kao mjera darovitosti i odredi se neki kriterij iznad kojeg definiramo darovitost, moguće je, što često vidimo u praksi, da djeca s teškoćama učenja zbog svoje specifične teškoće zbog koje postižu niže bodove na nekim testovima, ne dostižu taj kriterij unatoč tome što su darovita. Na to upozoravaju i stručnjaci (Lovett i Sparks, 2010). S druge strane, mnoga darovita djeca s teškoćama učenja mogu zamaskirati teškoću zbog svojih kognitivnih sposobnosti. Tako će imati niža postignuća na nekim testovima, ali ne toliko da bi zaključili da se radi o specifičnoj teškoći (Lovett i Sparks, 2010). Lovett i Sparks (2010) izvješćuju da je prevalencija ove djece oko 5 %. Taj postotak moramo uzeti s oprezom s obzirom na činjenicu da mnoga darovita djeca s teškoćama učenja nisu dijagnosticirana. U praksi tako imamo 3 skupine učenika (Baum, 1990): a) daroviti s blažim teškoćama učenja kod kojih teškoće nisu prepoznate, b) učenici s prosječnim postignućem kod kojih nisu prepoznate ni darovitost ni teškoće, c) učenici s teškoćama učenja čija darovitost nije prepoznata.

Autor McCallum sa suradnicima (McCallum i sur., 2013) predlažu sljedeću metodu identifikacije darovitih učenika s teškoćama učenja. Ona uključuje mjerenje

postignuća u matematici i hrvatskom jeziku standardiziranim testovima. Visoko iznadprosječni rezultati u jednom testu, a niski u drugom sugerirali bi mogućnost da je riječ o istovremenom postojanju teškoće i darovitosti. U svojem radu analizirali su kritične razlike u postignuću između jezika i matematike koje bi upućivale da je riječ o specifičnoj teškoći u jednom, a darovitosti u drugom području. Iako bi se možda ovom metodom prepoznali učenici s teškoćama čitanja ili teškoćama u matematici i autori ističu kako se na taj način ne bi prepoznali učenici s drugim teškoćama poput sporosti u obradi informacija. Isto tako, može se zaključiti da ovom metodom ne bi bilo moguće prepoznati darovite učenike koji imaju istovremeno i teškoće čitanja i teškoće u matematici. Neki autori također zagovaraju pristup promatranja intraindividualnih razlika, za razliku od interindividualnih razlika (Assouline i sur., 2010; Brody i Mills, 1997; Nielsen, 2002). Tako, primjerice, sposobnost verbalnoga shvaćanja može biti visoko iznadprosječna kod nekog učenika dok je na rezultatima razumijevanja pročitanoga prosječno postignuće. Iako je na testu razumijevanja pročitanoga postignut prosječan rezultat, ta razlika u postignuću može ukazivati da je riječ o darovitom učeniku s teškoćama čitanja. Jedan primjer studije slučaja to zorno prikazuje (Gilman i sur., 2013). U studiji slučaja uključena je djevojčica u dobi od 8,5 god. s dijagnozom disleksije, teškoćama u obradi slušnih informacija i darovitosti u matematici. Na WISC-IV testu rezultati su bili iznadprosječni na verbalnom shvaćanju i perceptivnom rasuđivanju, prosječni na području radnoga pamćenja, a rezultat na području brzine obrade informacija ukazivao je na niski prosjek prema graničnim vrijednostima. Najniži rezultati bili su na zadatcima rječnika, slušnom pamćenju, brzini vizualno-motorne obrade i vizualnoj percepciji. Rezultati na testu čitanja i pisanja bili su lošiji u odnosu na očekivani iznadprosječni kvocijent verbalnoga shvaćanja na WISC-IV ljestvici. No, postignuće na tom testu nije značajno ispod postignuća za dob i ona u školi u SAD-u ne bi bila uključena u program podrške. Istraživanja su pokazala da su niži rezultati na zadatku šifriranja (test brzine obrade informacija) i radnom pamćenju snažan indikator postojanja teškoća kod darovitih (Waldron i Saphire, 1990; Assouline i sur., 2010). Zapravo, Assouline i suradnici (2010) otkrili su da oslanjanjem na ukupni rezultat na WISC testu intelektualnih sposobnosti (izračunat temeljem rezultata na cijeloj skali), umjesto na opći indeks sposobnosti (GAI, opisuje kognitivno funkcioniranje učenika višega reda bez utjecaja radnoga pamćenja i brzine obrade informacija) mnoga darovita djeca s teškoćama učenja mogu ostati nedijagnosticirana. Iako su rezultati na testovima brzine obrade informacija i radnoga pamćenja često niži kod darovitih učenika s teškoćama učenja, rezultati istraživanja pokazuju kako nema jedinstvenoga profila sposobnosti kod darovite djece s teškoćama učenja (Assouline i sur., 2010).

Osim rezultata na testu inteligencije nužni su valjani mjerni instrumenti koji nam pružaju informacije o snagama učenika. Primjer takvih skala su 100 NIELSEN Scales for Rating the Behavioral Characteristics of Superior Students–Revised (Renzulli i sur., 1997), Tests of Creative Thinking (Torrance, 1966) i Checklist of Creative Positives (Torrance, 1977).

Karakteristike darovitih učenika s teškoćama učenja

Vezano za kognitivne karakteristike provedeno je više studija slučajeva u kojima je analiziran profil rezultata na WISC ljestvici intelektualnih sposobnosti kod darovitih učenika s teškoćama učenja (Al-Hroub, 2011; Assouline i sur., 2006; Gilman i sur., 2013). Pregledom tih radova može se ustanoviti kako se daroviti učenici s teškoćama učenja razlikuju na rezultatima na WISC ljestvice intelektualnih sposobnosti. Ono što im je zajedničko jest neujednačen profil rezultata: iznadprosječne sposobnosti na nekom području, a granični rezultati na drugom području, dok su brzina obrade i radno pamćenje granični ili ispodprosječni. U nekoliko istraživanja ispitivane su razlike na testovima WISC ljestvice na manjim uzorcima i rezultati su isti. Waldron i Saphire (1990) su ustanovile razlike između darovitih učenika i darovitih učenika s teškoćama, a La France (1997) između darovitih učenika s disleksijom, darovitih učenika i učenika s disleksijom.

S obzirom da su metakognitivne vještine razvijenije od prosjeka kod darovitih učenika, a kod učenika s teškoćama učenja su manje razvijene, postavlja se pitanje o razvijenosti metakognitivnih vještina kod darovitih učenika s teškoćama učenja. Metakognitivne vještine su jedan od ključnih čimbenika uspješnosti u učenju (Ristić Dedić, 2019). Istraživanja u kojima su se proučavale metakognitivne vještine kod darovitih učenika s teškoćama učenja većinom datiraju iz 90-ih godina prošloga stoljeća. Pregledom dostupnih baza, pronađeno je samo jedno istraživanje u zadnjih 20 godina. U istraživanju Hannah i Shore (1995) utvrđeno je da su metakognitivno znanje i metakognitivne vještine, kao i kod darovitih, viši kod darovitih učenika s teškoćama nego kod prosječnih učenika u osnovnoškolskoj dobi, dok nisu utvrđene razlike u srednjoškolskoj dobi. Autori objašnjavaju da je moguće da testovi nisu bilo dovoljno osjetljivi u kasnijoj dobi, no moguće je da se s maturacijom razlike u metakognitivnim vještinama smanjuju. U jednom kvalitativnom istraživanju pokazalo se da daroviti učenici s teškoćama nisu toliko uspješni kod uporabe metakognitivnih strategija kao daroviti bez teškoća (Montague, 1991). Nešto novije istraživanje (Hannah i Shore, 2008) bavilo se ispitivanjem vještine motrenja razumijevanja pročitanoga kod 12 dječaka. Utvrđeno je kako su stariji učenici iz srednjih škola aktivni u motrenju razumijevanja pročitanoga za razliku od mlađih učenika osnovnih škola koji su manje aktivni (Hannah i Shore, 2008). Rezultate ovih istraživanja nije moguće generalizirati jer su uzorci mali i ograničeni na svega nekoliko škola.

Sustav koji ne prepoznaje darovitost, teškoće ili oboje kod učenika te ne pruža podršku koju učenik treba, može dovesti do niza tzv. sekundarnih teškoća. Baum i Owen (1988) proveli su jedno od prvih istraživanja u ovom području. Ono što je bilo zajedničko darovitim učenicima sa i bez teškoća od ostalih učenika jest snažniji osjećaj neefikasnosti. Daroviti učenici s teškoćama učenja imaju visok kreativni potencijal, no isto tako tendenciju za nepoželjna ponašanja i niže školsko postignuće. Istraživanja pokazuju da su daroviti učenici s teškoćama učenja, slično kao i učenici s teškoćama

učenja prosječne inteligencije suočeni s negativnim iskustvima koja mogu dovesti do frustracije, depresije, osjećaja beskorisnosti, smanjenoga samopouzdanja i agresivnosti (Nicpon, 2011; Hua, 2002) te suicidalnih misli (Gilman i sur., 2013). U kvalitativnom istraživanju iz SAD-a (Reis i sur., 1997) u kojem je sudjelovalo dvanaest darovitih studenata s teškoćama učenja prepoznate su dvije ključne kategorije: negativno iskustvo u školi i kompenzacijske strategije neophodne za postizanje uspjeha u školi. Većina sudionika dobila je dijagnozu tek u srednjoj školi ili na koledžu. Spominjali su razna negativna iskustva, kažnjavanja od strane učitelja i roditelja, okrutnoga ponašanja učitelja i vršnjaka. Neki su čak smještavani u posebne razrede za djecu s intelektualnim teškoćama i problemima u ponašanju. Specifične vještine i talente koje su pokazivali, učitelji bi interpretirali kao dokaz da su u biti lijeni ili nepažljivi. Svi su imali izvan škole pozitivna iskustva koja su im pomogla da prežive taj period i uspiju kasnije na studiju. Morali su razviti kompenzacijske strategije kako bi uspjeli (npr. umjesto čitanja, slušanje zvučnih zapisa; samozastupanje i dr.) i naučiti razne kognitivne i metakognitivne strategije učenja. Svi su izvijestili o važnosti podrške roditelja koji su u njih vjerovali i upisivali ih na različite programe izvan škole. Izabrali su studij koji je odgovarao talentima, a nije zahtijevao toliko rada gdje su potrebne vještine u kojima su imali teškoću. Reis i Colbert (2004) ponovili su istraživanje nekoliko godina kasnije na uzorku od 15 studenata i dobili gotovo iste rezultate. Polovica studenata zbog emocionalnih teškoća morala je na psihološko savjetovanje nakon što su završili srednju školu.

Sustavnim pregledom 23 istraživanja koja su se bavila ovim područjem autori Beckmann i Minnaert (2018) zaključuju kako je većini darovitih učenika s teškoćama učenja zajednička visoka razina negativnih emocija, nisko samopouzdanje, frustracija školom, poteškoće u odnosima. S druge strane, imaju visoku razinu intrinzične motivacije i razvili su razne strategije suočavanja i otpornost na stres.

Osim pozitivnih karakteristika ličnosti koje spominju u svojem radu (Beckmann i Minnaert, 2018), u jednom je istraživanju utvrđeno kako su daroviti učenici s disleksijom kreativni i imaju izraženiji smisao za humor, poput ostalih darovitih učenika, a za razliku od prosječnih učenika koji imaju disleksiju (La France, 1997). Kompenzacijske su strategije nužne ovim učenicima za dostizanje uspjeha. Jedno istraživanje, iako samo na uzorku od 42 djece, ukazuje da daroviti učenici s teškoćama učenja više koriste pozitivne strategije nošenja sa stresom i frustracijama s kojima se suočavaju u školi u odnosu na djecu s teškoćama učenja (Coleman, 1992).

Daroviti učenici s ADHD-om

ADHD poremećaj odnosno poremećaj deficita pažnje i hiperaktivnosti je neurorazvojni poremećaj kojeg karakterizira trajni obrazac nepažnje i/ili hiperaktivnosti i impulzivnosti takvoga intenziteta da značajno utječe na funkcioniranje i razvoj pojedinca (American Psychiatric Association, 2013). ADHD poremećaj relativno je dobro operacionaliziran prema DSM-V priručniku (American Psychiatric Association, 2013) gdje se navodi

da dijete mora imati 6 ili više simptoma, a odrasli 5 i više simptoma nepažnje i ili hiperaktivnosti/ impulzivnosti koji nisu u skladu s razvojnom razinom pojedinca i koji imaju značajni nepovoljni utjecaj na funkcioniranje, u trajanju od najmanje 6 mjeseci. Ovi simptomi ne proizlaze iz opozicijskoga, protestnoga ponašanja, prkosa ili nerazumijevanja zadataka/uputa. Osobe s ADHD-om imaju poteškoća s izvršnim funkcijama (planiranje, organizacija, samoregulacija, inhibicija i dr.) što može imati nepovoljne posljedice u odnosima s vršnjacima, učiteljima i članovima obitelji (Dumas, 1998). Poput učenika s teškoćama učenja učenici s ADHD poremećajem imaju često poteškoće u školi i niži školski uspjeh (Daley i Birchwood, 2010).

Procjenjuje se da je oko 10 % osoba s ADHD-om darovito (Antshel i sur., 2007; Chae i sur., 2003). Procjena darovitih s ADHD-om posebno je složena budući da su neki simptomi ADHD-a slični karakteristikama ponašanja darovite djece (Kalbfleisch i Iguchi, 2007; Nelson i sur., 2006). Pažnja darovitih nije na onom sadržaju kojih ih ne zanima; često kad im je nešto dosadno i nedovoljno stimulativno mogu mislima „odlutati" (Webb i sur., 2005). Daroviti također imaju poteškoća sjediti mirno, čekati na red te općenito imaju više energije, kao i djeca s ADHD-om te je mogućnost za pogrešnom dijagnozom velika (Hartnett i sur., 2004; Webb i Latimer, 1993, Webb i sur., 2005).

Iako naizgled postoji sličnost u ponašanju darovitih i ponašanju djece s ADHD-om, opažanjem ponašanja uočava se da je primjerice nepažnja kod darovitih učenika situacijski specifična, dok su kod učenika s ADHD-om prisutne kontinuirano poteškoće s pažnjom. Visoka aktivnost kod darovitih općenito je fokusirana i usmjerena nekom cilju, dok je hiperaktivnost kod djece s ADHD-om često nasumična i nije usmjerena cilju (Leroux i Levitt-Perlman, 2000). Kod darovitih učenika s ADHD-om, simptomi ADHD-a i talenti mogu maskirati jedno drugo (Ruban i Reis, 2005a). Daroviti učenici s ADHD-om imaju primjerice bolje rezultate na testovima pažnje, npr. na T.O.V.A (Chae Ji-Hye i Kyung-Sun, 2003) Brickenkamp's d2, Conners´ Continuous Performance Test CPTII (Benito i Guerra, 2012) u odnosu na učenike s ADHD-om prosječne inteligencije, a lošije od rezultata koje postižu daroviti učenici bez ADHD-a. Najčešće im se postavlja samo jedna dijagnoza ili se dijagnoza postavlja tek kasnije tijekom školovanja (Kalbfleisch i Iguchi, 2007; Ruban i Reis, 2005a) dok mnogima nikad ne bude postavljena dijagnoza (Moon, 2002). Moguće je također da neki učenici dobiju pogrešnu dijagnozu, primjerice dijagnozu ADHD-a, a u biti su daroviti (Hartnett i sur., 2004.) Nažalost, može im čak biti propisana i medikamentozna terapija, umjesto planiranja obrazovne podrške.

Karakteristike darovitih učenika s ADHD-om

U istraživanjima se pokazalo da daroviti s ADHD-om imaju u prosjeku niže rezultate na mjerama pažnje i verbalnoga radnog pamćenja u odnosu na darovite učenike bez ADHD-a, a više u odnosu na učenike s ADHD-om prosječne inteligencije (Benito i Guerra, 2012; Whitakeri sur., 2015). Pokazalo se također kako daroviti učenici s

ADHD-om imaju poteškoće u izvršnim funkcijama, poput planiranja i organizacije, poteškoće s verbalnim pamćenjem te simptome nepažnje i impulzivnosti (Chae i sur. 2003; Mahone i sur., 2002). Međutim, te su teškoće manje izražene u odnosu na učenike s ADHD-om prosječne inteligencije.

ADHD se veže s teškoćama u izvršnim funkcijama za koje je zadužen prefrontalni režanj. Budući da su daroviti upravo superiorni u izvršnim funkcijama, pretpostavka je da je kod darovitih s ADHD-om problem s pažnjom više povezan sa stražnjim dijelom korteksa te vodi do poteškoća sa senzornom integracijom i integracijom informacija povezanih s emocijama (Sousa, 2003, prema Wood, 2012).

U jednom istraživanju pokazalo se da je kod darovitih dječaka s ADHD-om još više teškoća u socijalnim interakcijama i emocionalnih teškoća u odnosu na dječake koji imaju samo ADHD ili samo darovitost (Moon i sur., 2001).

Daroviti učenici s ADHD-om trebaju također podršku tijekom školovanja. U slučaju da izostane podrška, javljaju se sekundarne teškoće. U nekoliko istraživanja (Anshtel i sur., 2007; Zentall i sur., 2001) pokazalo se da su u usporedbi s darovitom djecom bez ADHD-a, daroviti učenici s ADHD-om češće ponavljali razred ili imali niže ocjene. Isto tako, imali su niz emocionalnih teškoća, poremećaja raspoloženja, anksioznosti, poremećaja u ponašanju, poteškoća u odnosu s vršnjacima, stresa u obitelji (Zentall i sur., 2001) i niže samopouzdanje te su postignuti niži rezultati na mjeri osjećaja sreće i zadovoljstva u odnosu na darovitu djecu bez ADHD-a (Foley-Nicpon i sur., 2012). S druge strane, daroviti učenici s ADHD-om imaju iznimne sposobnosti koje bi trebalo poticati tijekom školovanja. Istraživanja pokazuju kako daroviti učenici s ADHD-om imaju jedinstvenu sposobnost povezati naizgled nepovezano, imaju mogućnost hiperfokusa te mogu dugo biti usmjereni na jednu stvar (Wood, 2012) i kreativniji su od darovitih bez ADHD-a (Fugate i sur., 2013).

Daroviti učenici s poremećajem iz spektra autizma

Poremećaj iz spektra autizma (PSA) je neurorazvojni poremećaj kojeg obilježavaju odstupanja u socijalnoj komunikaciji i interakciji te atipičnosti u obilježjima općega ponašanja i interesa (APA, 2015). On istovremeno može zahvaćati veći broj razvojnih područja na koja može utjecati na različit način što rezultira velikom raznolikošću razvojnih profila i ishoda (Cepaneci sur., 2015). Novija istraživanja ukazuju da je prevalencija ovoga poremećaja 1 naprama 54 (Maenner i sur., 2020) što ga čini jednim od najčešćih razvojnih poremećaja.

Kad govorimo o poremećaju iz spektra autizma (PSA), važno je razgraničiti pojam tzv. savant vještina koje se često vežu uz ovu populaciju od darovitosti. Savant vještine vežu se za osobe koje unatoč većim intelektualnim teškoćama imaju jako razvijene vještine na određenom specifičnom području. Te vještine mogu biti na području matematike (izračuni datuma, primarnih brojeva te brzina u aritmetičkim vještinama), muzike (sviranje kompleksnih sekvenci nakon samo jednog preslušavanja), umjetnosti (kompleksne scene s točnim perspektivama koje osoba reproducira nakon vrlo kratkoga

opažanja) i jako dobro pamćenje određenih mjesta, datuma, ruta ili činjenica (Howlin, 2012). U ovom radu, fokus će biti na darovitosti kako je opisana u uvodu, odnosno uključivat će istraživanja vezana za darovitu djecu s poremećajem iz spektra autizma koja nemaju intelektualne teškoće.

Charman i sur. (2014) navode da je prevalencija intelektualno darovitih u populaciji učenika s PSA 3 %, dok 55 % ovih učenika ima intelektualne teškoće. U istraživanju koje je obuhvaćalo veći uzorak škola (ukupno 319 469 sudionika) i u kojem su istraživane četiri vrste darovitosti – intelektualna, akademska, umjetnička i kreativna – dobiven je isti postotak darovitih učenika s PSA, 3,3 % (Karnes i Shaunessy, 2004). Opet je važno naglasiti da ove podatke treba uzeti s oprezom obzirom na različite definicije darovitosti te s teškoćama koje se javljaju u prepoznavanju darovitih osoba s PSA. Te teškoće proizlaze iz nekoliko izvora. Naime, mnoge karakteristike koje se pripisuju darovitosti, slične su karakteristikama PSA (npr. teškoće u socijalnoj interakciji, socijalna izolacija, dobro pamćenje, fokusiranost itd.), nadalje, darovitost može zamaskirati i kompenzirati neke teškoće koje proizlaze iz PSA, ali isto tako zbog prije navedenih razloga PSA može zamaskirati i darovitost. Naposljetku, nije moguće napraviti čisti rez između darovitosti i PSA (Burger-Veltmeijer, 2007). Otkrivanje je teško i obzirom da su stručnjaci educirani ili za darovitost ili za PSA, a ne za oboje (Henderson, 2001; Foley – Nicpon i sur., 2013).

Pri procjeni učenika s PSA Indeks opće sposobnosti (Global Ability Index) treba uzeti u obzir umjesto FSIQ (Full Scale IQ). Kad postoji velika varijabilnost, i kad su vještine mišljenja višega reda (rješavanje problema) značajno drugačije od vještina mišljenja nižega reda, FSIQ je potisnut rezultatima na zadatcima koji ispituju vještine mišljenja nižega reda (slušno radno pamćenje, kognitivnu obradu ili vizualno skeniranje). To se može negativno odraziti kod darovitih učenika te se oni mogu krivo percipirati kao prosječni (Foley – Nicpon i sur., 2012).

Karakteristike darovitih učenika s poremećajem iz spektra autizma

Daroviti učenici s PSA imaju vrlo visoku opću kognitivnu sposobnost (*general cognitive ability*) te iznadprosječne sposobnosti verbalnoga i/ili perceptivnoga rezoniranja, a razlikuju se od darovitih učenika bez teškoća u područjima brzine obrade informacija, radnoga pamćenja, adaptivnoga i psihosocijalnoga funkcioniranja te socijalnih vještina (Nicponi sur., 2010; Foley – Nicpon i sur., 2012). Nadalje, ti učenici više koriste usluge vezane za mentalno zdravlje i medikametoznu terapiju od učenika s PSA koji nisu daroviti (Cain i sur., 2019).

Cain i suradnici (2019) su uspoređivali akademska postignuća darovitih i nedarovitih učenika s PSA. U svojem su istraživanju obuhvatili 696 učenika s PSA. Obje grupe postigle su više rezultate na akademskim vještinama nižega reda (*lower order academic skills*) (računanje i identifikacija slova i riječi), a niže rezultate na vještinama višega reda (*higer order skills*) (primijenjeni problemi). Radno pamćenje i brzina obrade

informacija pokazale su se kao prediktori akademskoga uspjeha darovitih s PSA (u području čitanja, pisanja i matematike) (Assouline i sur., 2012). Međutim, to su ujedno i područja na kojim ovi učenici postižu niže rezultate u odnosu na područja verbalnih i neverbalnih vještina (Foley-Nicpon i sur., 2012). To upućuje da bi teškoće u zadržavanju informacija u slušnom radnom pamćenju i u brzini obradi informacija kod učenika s visokim verbalnim i neverbalnim IQ-om mogle imati negativan učinak na akademski uspjeh učenika s PSA (Assouline i sur., 2012). Također se u istraživanju Assouline i suradnika (2012) pokazalo da su vještine fine motorike povezane s postignućima u matematici.

Jedna je longitudinalna studija pokazala razliku u akademskim postignućima između darovitih i nedarovitih s PSA koja je prisutna od najmlađe dobi te daroviti studenti tijekom vremena postižu više rezultate, a nedaroviti niže u odnosu na vršnjake tipičnoga razvoja (Cain i sur, 2019). Pokazalo se također da se postotak darovitih u uzorku s vremenom smanjio. Autori su ponudili objašnjenja koja uključuju nedostatnost školskoga sustava u poticanju ove djece, ali i ograničenje same definicije i mjerenja darovitosti u različitoj dobi (Cain i sur, 2019).

U istraživanju Nicpon i suradnika (2012), roditelji, učitelji i darovita djeca s PSA ispunjavali su Skalu procjene ponašanja za djecu (Behaviour Assessment Scale for Children). Procjene roditelja ukazale su na klinički značajne rezultate na podskalama u kojima se procjenjuju atipičnosti ponašanja, problemi s pažnjom, depresija, hiperaktivnost, povučenost, prilagodljivost i socijalne vještine, a procjene stručnjaka na podskalama atipičnosti ponašanja, depresije, povučenosti i prilagodljivosti. Samoprocjena samih učenika upućivala je na prosječne rezultate. Zanimljivo je da roditelji i učitelji izvještavaju o povećanoj prilagodljivosti kod adolescenata i smanjenim atipičnostima s dobi, a sličan trend bolje prilagodbe na promjenu s dobi dobiven je i u drugim istraživanjima djece i adolescenata s poremećajem iz spektra autizma (Barnhill i sur., 2000).

Podrška darovitim učenicima s teškoćama

Pretraživanjem istraživanja koja su se bavila podrškom darovitih učenika s teškoćama može se zaključiti kako je većinom riječ o istraživanjima s područja SAD-a i analize njihova obrazovanja. U ovom poglavlju bit će prikazana istraživanja do kojih se došlo pretraživanjem istraživačkih baza, a u sljedećem poglavlju bit će prikazan osvrt na podršku darovitim učenicima u Hrvatskoj.

Mnogi učitelji i stručnjaci, u najboljoj namjeri, brinući se za teškoće učenika, zanemare učenikove jake strane i talente. Većina se autora slaže da u pristupu darovitim učenicima s teškoćama treba poticati darovitost, dati naglasak na područja u kojima su daroviti. Istraživanja pokazuju da daroviti učenici s teškoćama imaju puno bolji uspjeh u školi ako se tijekom obrazovanja više pažnje posveti njihovoj darovitosti, a smanji fokus na teškoće (Olenchak, 2009, Nielsen, 2002).

U jednom kvalitativnom istraživanju (Willard-Holt i sur., 2013) pitalo se darovite učenike s teškoćama o strategijama učenja i poučavanja. Ovi učenici su zamijetili

da im sveukupna školska iskustva nisu pomogla da iskoriste svoje potencijale, iako su naučili upotrijebiti svoje snage da zaobiđu svoje slabosti. Implikacije za učitelje uključivale su omogućavanje dvostruko izuzetnim učenicima davanje više slobode u učenju i više izbora i fleksibilnosti kod biranja tema, metoda učenja, tempu i suradnji s drugima (Willard-Holt i sur., 2013).

Jedno istraživanje pokazuje kako je stanje s IOOP-ima u SAD-u (Crim i sur., 2008). Od 112 darovite djece s teškoćama, učenika osnovne škole, koliko ih je obuhvaćeno istraživanjem, nije bilo zabilješki u IOOP-u da je ijedno dijete dobilo podršku u vidu programa za darovite. Ta su djeca dobila i manje prilagodbi od druge djece s teškoćama učenja. Dosadašnja su istraživanja pokazala da većina darovitih učenika s PSA nije uključena u programe za darovite učenike (Cain i sur, 2019) unatoč tome što se pokazalo da je uključenost u programe za talentirane i darovite prediktivna za akademski uspjeh npr. na području matematike (Assouline i sur, 2012).

Većina učitelja nažalost nema dovoljno znanja za primjenu intervencija ili prilagodbi koje će uzeti u obzir i darovitost i teškoću učenika, niti za prepoznavanje dvostruko izuzetnih učenika (Assouline i Whiteman, 2011). Stručnjaci su educirani ili za područje darovitosti ili za područje teškoća, odnosno specijalnoga obrazovanja, a rijetki imaju iskustva i znanja vezana za dvostruku izuzetnost (Foley-Nicpon i sur., 2013). Iskustva roditelja učenika s PSA ukazuju da su se oni morali boriti za socijalnu i akademsku podršku za svoju djecu u okviru školskoga okruženja koje nije imalo dovoljno stručnosti ni fleksibilnosti da odgovori niti na potrebe proizašle iz teškoća niti na one proizašle iz darovitosti (Rubenstein i sur., 2015).

U SAD-u se od sedamdesetih godina prošloga stoljeća u mnogim školama provodi tzv. The Schoolwide Enrichment Model namijenjen darovitim učenicima (Renzulli i Renzulli, 2010). Riječ je o visoko strukturiranom programu, s naglaskom na osobno usmjerenu podršku. Cilj je poticanje darovitosti u okruženju koje dovodi do uživanja u učenju, angažiranosti i entuzijazma za učenje. Program uključuje poticanje kreativnoga načina razmišljanja, rješavanja problema, kritičkoga razmišljanja i raznih strategija učenja (Renzulli i Renzulli, 2010).

Olenchak (1995) je istraživao učinak ovoga programa za darovite učenike s teškoćama učenja. Nakon godine dana provođenja ovoga programa daroviti učenici s teškoćama imali su bolji stav prema školi, bolju sliku o sebi te su bili uspješniji u kreativnom razmišljanju.

Osim važnosti usmjeravanja na interese i na područja u kojima su učenici s teškoćama daroviti, naglašava se također poučavanje strategija samoregulacije i tzv. kompenzacijskih strategija (za čitanje, pisanje, razumijevanje, matematičko razmišljanje) za ona područja u kojima učenici imaju teškoće (Moon i Reis, 2004). Za učenike s PSA važna je i procjena u kojoj učenici rješavaju stvarne probleme iz područja svojega interesa (Bianco i sur., 2009). Jedan od takvih programa za identifikaciju, poticanje kognitivnih sposobnosti i poučavanje kompenzacijskih vještina je tzv. program Talents Unlimited (Schlichter, Palmer, 1993). Nalazi istraživanja primjene ovoga programa

kod darovitih učenika s teškoćama učenja ukazuju da program rezultira boljim stavom prema školi i većim samopouzdanjem (Olenchak, 2009).

Posebnu pažnju treba obratiti darovitim učenicima s visoko razvijenim spacijalnim sposobnostima, a teškoćama u verbalnoj obradi. Tradicionalan način poučavanja temeljen na verbalnim informacijama, prisutan najčešće u SAD-u, ali i u Hrvatskoj, najmanje odgovara ovim učenicima. S potencijalom da postanu inženjeri, arhitekti ili inovatori, mnogi od njih ostanu nedovoljno obrazovani i podzaposleni (Humphreys i sur., 1993). Ovi će učenici napredovati ako se koristi interdisciplinirani pristup poučavanju što će im omogućiti da povezuju kako promjene u jednom području utječu na drugo područje. U poučavanju treba imati u vidu kvalitativni stil razmišljanja kod ove skupine učenika, odnosno obradu od cjeline prema dijelovima i poučavanje kroz projekte i eksperimente (Mann, 2006). Nasuprot tome, pokazalo se da su strategije poučavanja koje uključuju učenje „napamet", puno čitanja i pisane upute neučinkovite za učenike darovite u spacijalnim vještinama, a s teškoćama u verbalnoj obradi (Weinfeld i sur., 2002).

Bianco i suradnici (2009) u svojem radu opisuju program temeljen na snagama (tzv. strength-based program) za učenike s PSA. Naglašavaju važnost uzimanja u obzir onoga što se kod osoba s PSA zove posebni interes kako bi se iskoristila motivacija učenika. Nadalje opisuju uključivanje mentora koji je stručnjak na specifičnom području interesa učenika što se može postići putem već u SAD-u ustanovljenoga International Telementor Programa ili nekim drugim manje formalnim kontaktom. I na kraju navode važnost korištenja prilagodbi koje uključuju učenikov interes i naslanjaju se na njegove snage (npr. vizualno učenje, usmjerenost na detalje) te međusobne suradnje učitelja, stručnjaka za posebno obrazovanje i roditelja.

Baum i suradnici (2001) pokušali su sumirati prilagodbe u nastavi s obzirom na potrebe darovitih učenika s teškoćama: alternativni načini prezentiranja i pristupanja informacijama, alternativni načini izražavanja ideja i izvršavanja zadataka, kurikul koji se zasniva na interesima i talentima učenika, stvaranje prilika za druženje s učenicima istih sposobnosti i interesa te priznanja za postignuća.

Daroviti učenici s teškoćama u Hrvatskoj

Na stranicama Ministarstva znanosti i obrazovanja ukratko su dane vrlo općenite upute o obrazovanju darovitih učenika (MZO, n. d.). Uz temeljne zakone vezane za odgoj i obrazovanje postoje zastarjeli pravilnici za darovite učenike (NN34/91) te noviji pravilnik za učenike s teškoćama (NN24/15). Autori Zrilić i Marin (2017) u svojem preglednom radu spominju nacrt novoga pravilnika za darovite učenika koji je u proceduri te nažalost još nije na snazi. Naglašavaju važnost sustavne potpore ovim učenicima i njihovom pravu na primjerene programe. Također opisuju različite mogućnosti za ove učenike predviđene u nacrtu novoga pravilnika, kao što je osiguravanje mentora koji bi pratio i vrednovao rad i napredak učenika, organiziranje školskih timova koji bi provodili postupak utvrđivanja darovitosti i procjenu napretka darovitih učenika,

utvrđivali program rada te pružali stručnu pomoć darovitom učeniku, učiteljima/nastavnicima i roditeljima. Predviđeno je nadalje, kako osnivači škola mogu za više škola na svojem području organizirati centre izvrsnosti u kojima bi se provodili posebni oblici rada za darovite učenike (Zrilić, Marin, 2017). Autori Zrilić i Marin (2017) zaključuju kako, unatoč propisima, u praksi često daroviti učenici nisu prepoznati, učitelji ne potiču njihovu različitost, niti obogaćuju programe, a nerijetko i ignoriraju darovitost kod učenika. U prilog ovom zaključku idu i rezultati već spomenutoga hrvatskog istraživanja u kojem je utvrđeno kako daroviti gimnazijalci nisu uspješniji u školi u odnosu na vršnjake koji nisu daroviti (Kolić-Vehovec i Rončević, 2003).

U Pravilniku o osnovnoškolskom i srednjoškolskom odgoju i obrazovanju učenika s teškoćama u razvoju (NN24/15) navedeno je kako programska potpora za učenike s teškoćama u razvoju obuhvaća različite vrste primjerenih programa odgoja i obrazovanja, dodatne odgojno-obrazovne i rehabilitacijske programe te privremene oblike odgoja i obrazovanja koji se provode u školama i drugim javnim ustanovama koje provode djelatnost odgoja i obrazovanja. Unatoč zakonski osiguranoj potpori, istraživanja i praksa, kao i kod darovitih učenika, pokazuje kako mnogi učenici s teškoćama ne dobivaju podršku u dovoljnoj mjeri (Sekušak-Galešev i sur., 2015, Kudek Mirošević i Opić, 2011).

U hrvatskoj znanstvenoj literaturi nema preglednih ni istraživačkih radova o temi darovitih učenika s teškoćama. U zakonima i pravilnicima također nije definirana potpora učenicima koji su i daroviti i imaju teškoće učenja te možemo pretpostaviti kako bi za te učenike vrijedili propisi za darovite kao i propisi za učenike s teškoćama. Tako u Zakonu o odgoju i obrazovanju u osnovnoj i srednjoj školi (NN 87/2008), stoji kako su učenici s posebnim odgojno-obrazovnim potrebama učenici s teškoćama te daroviti. Navodi se da su za tu skupinu učenika nužne razlike u ciljevima, odnosno očekivanim postignućima, sadržajima i metodama učenja i poučavanja sukladno njihovim individualnim sposobnostima i posebnostima.

Jedini dokumenti u kojem se spominju daroviti učenici s teškoćama su Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje (NOK, MZOS, 2010) u kojem se navode kao učenici s dvostrukim posebnim potrebama te u dokumentima nastalima u procesu cjelovite kurikulne reforme, u Okviru za poticanje i prilagodbu iskustava učenja te vrednovanje postignuća djece i učenika s teškoćama (MZO,2017) te Okviru za poticanje iskustava učenja i vrednovanje postignuća darovite djece i učenika (MZO,2017). U tim dokumentima navodi se kako posebnu pažnju treba posvetiti upravo ovim učenicima koji često ostaju neprepoznati.

Mišljenje autorica je kako većina stručnjaka s područja odgoja i obrazovanja nije ni svjesna postojanja ove skupine učenika te smo nekako još na početku pružanja podrške tzv. dvostruko izuzetnim učenicima. Daroviti učenici s teškoćama nisu definirani kao posebna skupina u zakonima i pravilnicima vezanim za odgoj i obrazovanje; pretraživanjem baza utvrđena su istraživanja o darovitim učenicima kao i o učenicima s teškoćama, no nije pronađeno ni jedno hrvatsko istraživanje o učenicima koje uz

darovitost imaju i teškoće. Isto tako, kliničko iskustvo autorica ukazuje na izostanak podrške ovim učenicima u odgoju i obrazovanju. Potrebno je razviti sustavni plan djelovanja za darovite učenike s teškoćama, od podizanja svijesti o postojanju ove skupine učenika do prepoznavanja i pružanja podrške temeljem istraživanja i stručnih iskustava.

Zaključak

Podrška darovitim učenicima s teškoćama još uvijek nije dostatna, a razlozi leže u neujednačenosti definiranja, a time i načinu procjene darovitosti, teškoća te procjene kombinacije darovitosti i teškoća. Kašnjenje u procjeni ili nedostatak procjene utječu nepovoljno na razvoj ovih dvostruko izuzetnih učenika. Nepovoljni razvoj ogleda se u prisutnosti tzv. sekundarnih teškoća, frustracije, depresije, osjećaja beskorisnosti, smanjenoga samopouzdanja, pojave agresivnosti (Nicpon, 2011; Hua, 2002) i suicidalnih misli (Gilman i sur., 2013). Jasne, precizne i ujednačene definicije omogućile bi metodološki snažnija istraživanja i brži razvoj spoznaja o ovom području. U Hrvatskoj smo tek na početku. Osvještavanje o postojanju tzv. dvostruko izuzetnih učenika i znanstvena istraživanja o položaju ovih učenika u sustavu obrazovanja prvi su korak u planiranju i uvođenju sustavne podrške.