

Original article

Predictive influence of sociodemographic characteristics and the type of developmental disorder on children's adaptive achievements

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Summary

Introduction. Adaptive behavior, which includes conceptual, social, and practical skills, is a key indicator of children's daily functioning. Its assessment is particularly important in identifying intellectual disabilities, as well as in evaluating the developmental potential of children with various developmental disorders and those with typical development. The aim of this study was to examine the predictive power of sociodemographic factors and type of developmental disorder in relation to children's adaptive achievements.

Methods. The study was conducted on a sample of 183 children, aged 4 to 14 years, divided into four groups: children with developmental language disorder (DLD), autism spectrum disorder (ASD), mild intellectual disability (MID), and typically developing children (TD). Data were collected using a specially designed questionnaire and the Adaptive Behavior Diagnostic Scale (ABDS).

Results. Regression analysis showed that the type of developmental disorder was the strongest predictor of adaptive functioning across all examined domains. The number of siblings was also a significant predictor of the overall adaptive score and most individual domains, except the social domain. Family income emerged as the significant predictor in the conceptual domain.

Conclusion. The type of developmental disorder has a dominant influence on children's adaptive achievements, while certain sociodemographic variables additionally contribute to explaining variations in adaptive behavior. These findings highlight the need for an individualized approach in assessment and intervention planning.

Key words: adaptive behavior, developmental disorders, sociodemographic characteristics, children

Introduction

The construct of adaptive behavior includes skills necessary for individuals to meet their personal needs and respond to the social and cultural demands of their environment [1]. Over time, the ability to act appropriately and adequately in various situations has expanded to encompass sets of skills, including not only social competence (social adaptive skills) but also skills integral to everyday life, such as receptive-expressive vocabulary and functional academic knowledge (conceptual adaptive skills), as well as the ability to care for oneself at home and within the community (practical adaptive skills) [2]. While the assessment of adaptive behavior has traditionally been associated with the identification and classification of intellectual disability (ID), recent research findings indicate that the evaluation of adaptive skills is also crucial for other developmental disorders [3], as well as for typically developing children (TD).

Developmental language disorder (DLD) is characterized by deficits in the development of expressive and receptive modalities of language function that are not caused by hearing impairment, autism spectrum disorder, general cognitive deficits, socio-emotional disorders, or environmental factors [4]. It is expected that children with DLD achieve the poorest results in the conceptual domain, given that this adaptive domain predominantly relies on speech-language abilities.

Autism spectrum disorder (ASD) is a neurodevelopmental disorder defined by two core domains: deficits in social communication and interaction, and restricted, repetitive, and stereotyped patterns of behavior or activities [5]. Based on the results of numerous studies, a typical profile of adaptive behavior in ASD has been established on VABS scales, consisting of low achievements in the socialization domain, average values in the communication domain, and the highest values in daily living skills [6, 7, 8, 9, 10].

Intellectual disability (ID) is a condition occurring before the age of 18 and is characterized by significant limitations in intellectual and adaptive functioning [11]. The majority (approximately 85%) of individuals with ID belong to the group with mild intellectual disability (MID) [12]. Deficits in the social domain, along with deficits in certain functional academic and communication skills, form the core difficulties in children and adults with MID [13]. A relatively small number of studies have examined the predictive impact of various socioeconomic status (SES) indicators in different child populations [14, 15, 16, 17, 18, 19, 20]. Given the generally contradictory results obtained in these studies, the primary aim of our research was to examine the predictive impact of sociodemographic characteristics (parents' education, employment, and marital status, family income, and the number of siblings) and the type of developmental disorder on children's adaptive achievements.

Methods

Research Design

The sample consisted of 183 participants of both sexes, aged 4 to 14 years (mean age = 9.22 \pm 2.79). Out of the total number of children surveyed, 57 (31.1%) were girls, and 126 (68.9%) were boys. The total sample was divided into four groups: the first group consisted of 31 children with DLD; the second group included 30 children with ASD; the third group comprised 33 children with MID; and the fourth group included 89 TD children. The selection of participants with DLD was based on a review of speech therapy documentation from the institutions involved in the study, while IQ scores for participants with MID and ASD were obtained from psychologists' documentation.

Instruments

Data on the individual characteristics of the participants (sex, age, type of disorder, parental education, employment and marital status of parents, family income, and number of siblings) were collected using the sociodemographic questionnaire specifically designed for this research.

To assess adaptive skills (conceptual, social, practical), the Adaptive Behaviour Diagnostic Scale (ABDS) [2] was used. The ABDS is a rating scale specifically designed to assess adaptive skills in children and adolescents aged 2 to 21 years. This instrument comprises three subscales evaluating adaptive skills in three domains: conceptual, social, and practical. Each subscale consists of 50 items. Items across all subscales are scored on a scale from 0 to 4: it cannot do it (0); it can do it, but it does not do it (1); it can do it, but only with help (2); it can sometimes do it on its own (3); it can do it on its own - most of the time, or it used to do it when it was younger. (4). The maximum raw score for each subscale (conceptual, social, practical) is 200 points, and the maximum raw score for the entire scale is 600 points. The scores for each subscale are summed to produce a total raw score, which is then converted into equivalent standardized scores for each domain. The standardized scores of all three domains are summed to get a total adaptive score, which represents the most reliable result of the ABDS scale. The ABDS scale provides a descriptive classification of standard scores for domains and the adaptive composite score, where the obtained values are categorized into one of the following levels: extremely low functioning (<55), very low functioning (55-69), low functioning (70-79), low average functioning (80-89), average functioning (90-109), above average functioning (>109). Based on this classification, the level of acquired adaptive skills for each score can be determined, i.e., the rank obtained by comparing the individual's performance with the scores of the normative group.

For this study, special attention was given to selecting appropriate informants. The primary condition for the informant was familiarity with the participant, ensuring they had daily and direct insights into the participant's adaptive behavior for a minimum period of six months. Informants in the experimental groups were therapists (speech-language pathologists and special educators and rehabilitators), while informants for the control group were the children's preschool teachers, teachers, or school instructors. In our research, the ABDS scale demonstrated excellent reliability, as expressed by Cronbach's alpha coefficient, which was 0.990 for the entire scale. Additionally, a detailed reliability check revealed that each domain (subscale) had excellent reliability: conceptual domain (0.979), social domain (0.980), and practical domain (0.964).

Time and Location of the Research

The research was conducted during the 2020/2021 academic year in citizens' associations for children and youth requiring special support, preschools, regular schools, and special schools in Republic of Srpska. The study was implemented after obtaining written consent from the directors of the institutions where the research was carried out.

Statistical Measures

Data analysis was performed using the SPSS statistical software package, version 21.0 (Statistical Package for Social Sciences, SPSS 21.0 Inc., USA). Methods of descriptive statistics and standard multiple regression were used. Descriptive statistics included calculating basic measures of central tendency (mean) and dispersion (standard deviation), as well as minimum and maximum values to describe the fundamental characteristics of the data. Predictors were identified through standard multiple regression analysis, with the standardized coefficient β used as a parameter to examine the contribution of each independent variable in the model to predicting the dependent variable. Standard multiple regression was applied in accordance with the assumptions of multiple regression, including the normal distribution of data, which was tested using the Kolmogorov-Smirnov test (p > 0.05), and the absence of multicollinearity. (r \leq 0.7). A significance level of p < 0.05 was adopted for statistical significance. Data were presented in tables.

Results

Table 1 shows the minimum, maximum, average values, and standard deviations of the conceptual, social, and practical standardized scores, as well as the total adaptive standardized score of the ABDS scale across the DLD, MID, ASD and TD groups of participants. Examination of this table reveals that TD participants outperform those with DLD, MID, and ASD across all adaptive domains and on the total adaptive score. Additionally, participants with DLD demonstrated better performance compared to those with MID and ASD across all adaptive domains and on the total adaptive score. Similarly, participants with MID outperformed those with ASD.

Table 2 presents the results of the prediction of socio-demographic characteristics and the type of developmental disorder on the conceptual domain of the ABDS scale for the entire sample. A multiple standard linear regression analysis on the total sample showed that among all the predictors examined, the type of disorder, family income, and the number of siblings were statistically significant predictors of the conceptual domain of the ABDS scale. For the total sample, socio-demographic characteristics and the type of disorder as a model explained 69.2% of the variance

Table 1. Minimum, maximum, average values, and standard deviations of the conceptual, social, and practical standardized scores, as well as the total adaptive standardized score on the ABDS scale for the MID, ASD, DLD, and TD groups of participants

ABDS scale scores	Groups of participants, subscales, and total score of the ABDS scale	Minimum	Maximum	AS±SD
	MID			
	conceptual score	40.00	84.00	50.76±14.34
	social score	40.00	93.00	62.27±16.59
	practical score	40.00	99.00	74.36±13.50
	Total score	125.00	251.00	187.39±37.26
	ASD			
	conceptual score	40.00	82.00	45.70±12.16
Standardized scores	social score	40.00	53.00	40.93±3.19
	practical score	40.00	84.00	62.33±2.45
	Total score	120.00	206.00	148.97±22.22
	DLD			
	conceptual score	40.00	92.00	65.03±15.28
	social score	40.00	107.00	78.06±23.27
	practical score	65.00	120.00	87.94±14.13
	Total score	147.00	319.00	232.45±47.94
	TD			
	conceptual score	66.00	121.00	97.33±10.85
	social score	70.00	115.00	102.29±7.67
	practical score	74.00	122.00	106.25±8.18
	Total score	220.00	336.00	305.71±20.22

ABDS - Diagnostic Scale for Assessing Adaptive Behavior; MID - Mild Intellectual Disability; ASD - Autism Spectrum Disorder; DLD - Developmental Language Disorder; TD - Typically Developing Children; AS - Arithmetic Mean; SD - Standard Deviation

Predictors of the conceptual domain of the ABDS scale	В	SE	β	Adjusted R ²	р
Diagnosis	19.322	1.062	0.880		<0.001
Sex	2.977	2.333	0.054		0.204
Father's educational level	0.546	1.977	0.017		0.783
Mother's educational level	0.550	2.015	0.017	0.692	0.785
Father's employment status	-5.144	3.831	-0.061		0.181
Mother's employment status	-1.006	2.547	-0.019		0.693
Family income	4.325	1.756	0.145		0.015
Parental marital status	-6.503	4.131	-0.073		0.117
Number of siblings	6.074	1.951	0.137		0.002

Table 2. Diagnosis (type of disorder) and socio-demographic characteristics as predictors of the conceptual domain of the ABDS scale in the entire sample of participants

ABDS - Diagnostic Scale for Assessing Adaptive Behavior; B - unstandardized regression coefficient; SE - standard error; β - standardized regression coefficient; R² - adjusted coefficient of determination; p - statistical significance

in the conceptual domain of the ABDS scale (adjusted $r^2 = 0.692$), with the type of disorder having the highest standardized coefficient β value ($\beta = 0.880$; p < 0.001), followed by family income ($\beta = 0.145$; p = 0.015) and the number of siblings ($\beta = 0.137$; p = 0.002) (Table 2).

Table 3 shows the results of the predictive influence of socio-demographic characteristics and the type of disorder on the social domain of the ABDS scale for the entire sample. Regression analysis on the total sample indicated that the type of disorder was the only statistically significant predictor of the social domain of the ABDS scale, while socio-demographic characteristics did not achieve statistical significance. For the total sample, socio-demographic characteristics and the type of disorder as a model explained 58.9% of the variance in the social domain of the ABDS scale (adjusted $r^2 = 0.589$), with diagnosis being the best predictor of the social domain of the ABDS scale (β = 0.840; p < 0.001) (Table 3).

Table 4 shows the predictive influence of socio-demographic characteristics and the

type of disorder on the practical domain of the ABDS scale for the entire sample. Regression analysis on the total sample demonstrated that among all the predictors examined, type of disorder and the number of siblings were statistically significant predictors of the practical domain of the ABDS scale, while characteristics such as sex, parental education levels, employment and marital status of parents, and family income were not statistically significant predictors of the practical domain. For the total sample, socio-demographic characteristics and the type of disorder as a model explained 56.7% of the variance in the practical domain of the ABDS scale (adjusted $r^2 = 0.567$), with diagnosis having the highest standardized coefficient β value (β = 0.756; p < 0.001), followed by the number of siblings (β = 0.130; p = 0.014) (Table 4).

Table 5 presents the results of the prediction of socio-demographic characteristics and the type of disorder on the total adaptive score of the ABDS scale for the entire sample. Regression analysis on the total sample showed that among the predictors examined, the type of disorder and the number of siblings were statistically significant predictors of the total adaptive score of the ABDS scale, while characteristics such as sex, parental education levels, employment and marital status of parents, and family income were not statistically significant predictors of the total adaptive score. For the total sample, socio-demographic characteristics and the type of disorder as a model explained 68.3% of the variance in the total adaptive score of the ABDS scale (adjusted $r^2 = 0.683$), with the type of disorder having the highest standardized coefficient β value ($\beta = 0.878$; p < 0.001), followed by the number of siblings ($\beta = 0.125$; p = 0.006) (Table 5).

Table 3. Diagnosis (type of disorder) and socio-demographic characteristics as predictors of the social domain of the ABDS scale in the entire sample of participants

Predictors of the social domain of the ABDS scale	В	SE	β	Adjusted R2	р
Diagnosis	19.185	1.276	0.840	0.589	<0.001
Sex	1.246	2.803	0.022		0.657
Father's educational level	1.679	2.376	0.052		0.481
Mother's educational level	-3.816	2.422	-0.114		0.117
Father's employment status	-3.401	4.604	-0.039		0.461
Mother's employment status	2.158	3.060	0.038		0.482
Family income	1.443	2.111	0.047		0.495
Parental marital status	-6.999	4.965	-0.076		0.160
Number of siblings	4.079	2.345	0.089		0.084

ABDS - Diagnostic Scale for Assessing Adaptive Behavior; B - unstandardized regression coefficient; SE - standard error; β - standardized regression coefficient; R² - adjusted coefficient of determination; p - statistical significance

Table 4. Diagnosis (type of disorder) and soc	cio-der	nograj	ohic charact	eristics as	predictors	s of the p	ractical
domain of the ABDS scale in the entire sam	ole of	partici	pants				

Predictors of the practical domain of the ABDS scale	В	SE	β	Adjusted R ²	р
Diagnosis	13.297	1.009	0.756		<0.001
Sex	1.563	2.217	0.035		0.482
Father's educational level	1.729	1.879	0.069		0.359
Mother's educational level	-2.638	1.916	-0.102	0.567	0.170
Father's employment status	0.930	3.642	0,014		0.799
Mother's employment status	-0.262	2.420	-0,006		0.914
Family income	-1.181	1.669	-0,050		0.480
Parental marital status	-0.332	3.927	-0,005		0.933
Number of siblings	4.617	1.855	0,130		0.014

ABDS - Diagnostic Scale for Assessing Adaptive Behavior; B - unstandardized regression coefficient; SE - standard error; β - standardized regression coefficient; R² - adjusted coefficient of determination; p - statistical significance

Predictors of the total standardized score of the ABDS scale	В	SE	β	Adjusted R ²	р
Diagnosis	52.119	2.909	0.878		<0.001
Sex	5.731	6.392	0.038		0.371
Father's educational level	4.602	5.418	0.055		0.397
Mother's educational level	-6.913	5.523	-0.079	0.683	0.212
Father's employment status	-8.567	10.499	-0.038		0.416
Mother's employment status	1.238	6.978	0.008		0.859
Family income	5.026	4.813	0.062		0.298
Parental marital status	-15.513	11.321	-0.065		0.172
Number of siblings	14.879	5.347	0.125		0.006

Table 5. Diagnosis (type of disorder) and socio-demographic characteristics as predictors of the total standardized score of the ABDS scale in the entire sample of participants

ABDS - Diagnostic Scale for Assessing Adaptive Behavior; B - unstandardized regression coefficient; SE - standard error; β - standardized regression coefficient; R² - adjusted coefficient of determination; p - statistical significance

Discussion

The results of our research revealed significant differences in the level of mastery of adaptive skills among the examined groups. Specifically, children with DLD, ASD, and MID had significantly poorer performance compared to TD children, both in overall adaptive scores and in individual adaptive domains - conceptual, social, and practical. These findings were highly expected and they are consistent with numerous previous studies comparing adaptive functioning between children with DLD and TD children [21, 22, 23], children with ASD and TD children [24, 25, 26, 27, 28, 29, 10], as well as children with MID and TD children [30, 31, 32].

Additionally, our study showed that children with DLD achieved better outcomes than those with ASD and MID, both in overall adaptive scores and in individual domains. The literature offers few studies focusing on differences in adaptive functioning between children with DLD and ASD. One such study by Loucas and colleagues [33] aimed to examine differences in adaptive behavior in 97 participants with DLD and ASD, aged 9 to 14 years. Their findings indicated that children with DLD achieved better results across all individual domains and overall adaptive scores compared to children with ASD, which aligns with our study's findings. Regarding differences in adaptive functioning between children with MID and DLD, our results partially confirm those of the only available study comparing adaptive skills between these two groups. Namely, in the study by Damberga and colleagues [22], children with DLD showed significantly better performance in all domains of adaptive skills. These findings were anticipated, as the preserved intellectual abilities of children with DLD enabled greater developmental capacity, helping them partially overcome difficulties associated with language deficits, such as challenges in the social domain [23].

In our study, children with ASD exhibited poorer outcomes across all adaptive domains, as well as in overall adaptive scores, compared to children with MID. Children with ASD demonstrated greater difficulties across all domains of adaptive behavior when compared to other children, both with and without developmental disorders [34], which our results corroborate.

When summarizing the results of our research on the entire sample, we observe that the type of disorder emerged as the most significant predictor of achievements in all examined domains (conceptual, social, practical) and the overall adaptive score on the ABDS scale. This result is entirely expected. Heyman and colleagues [15], in their study, states that the type of disorder is a characteristic of the child predicting outcomes related to adaptive functioning. For example, children with Down syndrome experience greater difficulties in the communication domain compared to the other two domains (social domain and daily living skills domain) [35]. Similarly, for children with DLD, the conceptual domain represents a stable area of weakness, meaning that all children with DLD have difficulties in nearly all aspects related to this domain of adaptive skills [23]. Research results involving larger samples of individuals with ASD consistently indicate that these individuals have significantly poorer abilities in the social domain compared to individuals with MID and developmental language disorders [36]. Our results, consistent with the findings of the mentioned studies, confirm that the type of disorder is the significant predictor of children's achievements across various adaptive domains and overall adaptive functioning.

The number of siblings among our sample was found to be the significant predictor in the conceptual and practical domains and overall adaptive scores on the ABDS scale. A review of the available literature revealed that the presence of siblings could positively correlate with better adaptive achievements across all three examined domains on the VABS scale: the communication domain [37, 38], the socialization domain [37, 39, 40], and the domain of daily living skills [41]. Similar results were observed in the study examining the relationship between the social functioning of children with ASD and the competence of their siblings [42]. The authors concluded that TD siblings could serve as competent role models, creating a stimulating environment for developing adaptive skills. A study by Rosen and colleagues [43] investigated in detail the influence of siblings on the adaptive functioning of children with ASD, aged 9 to 26 years. Factors such as the presence of siblings, birth order, sex, and sex congruence among siblings were explored. Their results showed that participants with one or more siblings demonstrated faster development of adaptive skills from late childhood to adulthood compared to those who were only children. These findings suggest that siblings can play a crucial role in shaping adaptive skills and overall outcomes of adaptive functioning in individuals with ASD. In contrast, our results did not indicate a predictive effect of siblings' presence solely in the social domain of adaptive functioning. These findings partially confirm results from two studies on the social functioning of TD preschool children, where the number of children in a family did not significantly predict adaptive skills development, particularly in the social domain [16, 17, 18]. Authors explained this by suggesting that excessive sibling interdependence might hinder children's independent learning of adaptive skills. Another explanation might be that TD siblings are perceived as competitors, displaying mutual negative emotions, which could reduce the learning of new skills.

In our study, family income was the significant predictor of adaptive functioning only in the conceptual domain. Higher family income is closely linked to providing a greater number of behavioral and cognitive stimuli, resulting in better achievements in various developmental domains [44]. This is particularly crucial for developing skills within the conceptual domain of adaptive functioning, such as functional academic skills, reading, writing, and arithmetic. Families with higher SES resources also tend to diagnose developmental issues earlier and more precisely [45], enabling access to various services, including early interventions specifically aimed at improving adaptive skills [46]. Tenerife and colleagues [20] emphasized that good family income was vital for ensuring adequate care for children with ASD exhibiting significant deficits in all domains of adaptive functioning. In summary, children with developmental disorders require a higher level of stimulation within their social environment, and greater family income represents a pathway to securing this stimulation.

When summarizing the results of our research, we can observe that the educational, employment, and marital status of parents did not prove to be significant predictors of the conceptual, social, and practical domains, as well as the overall adaptive score achieved on the ABDS scale. The results of our research can be partially compared to the study by Shewal and colleagues [18] which examined the adaptive functioning of children with DLD, as well as the predictive influence of various variables, including the educational and employment status of parents, on the adaptive achievements of their children. The results of this study also showed that none of the examined variables were significant predictors of achievements in the adaptive domains or the overall adaptive score.

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Ethical approval. The Ethics Committee of the University East Sarajevo, Faculty of Medicine Foča, Republic of Srpska, Bosnia and Herzegovina, approved the study

Conclusion

The type of disorder is the best predictor of adaptive functioning outcomes in children from different populations. The number of siblings was also the significant predictor for the total ABDS score and all adaptive domains except the social one. Family income emerged as the significant predictor of the conceptual domain. In our research, we examined the predictive influence of various socio-demographic characteristics and the type of disorder on the entire sample, which consisted of children from different populations. However, this influence should also be examined individually within each group of children included in the study, which represents an implication for future research.

and informed consent was obtained from all individual respondents. The research was conducted according to the Declaration of Helsinki.

Conflicts of interest. The authors declare no conflict of interest.

References:

- 1. Price JA, Morris ZA, Costello S. The application of adaptive behaviour models: a systematic review. Behav Sci (Basel) 2018;8(1):11.
- 2. Pearson NA, Patton JR, Mruzek DW. Adaptive Behavior Diagnostic Scale (ABDS): Examiner's manual. Austin, TX: Pro-Ed, 2016.
- Buha N, Gligorović M. Pažnja kao faktor adaptivnih veština kod dece sa lakom intelektualnom ometenošću. II naučni skup stremljenja i novine u specijalnoj edukaciji i rehabilitaciji. 2012, Beograd. Zbornik radova; p. 79–87.
- Drljan B, Vuković M. Leksička raznovrsnost u narativnom diskursu dece sa specifičnim jezičkim poremećajem. Specijalna edukacija i rehabilitacija 2017;16(3):261–87.

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-V, 2013.
- Bölte S, Poustka F, Constantino JN. Assessing autistic traits: cross-cultural validation of the social responsiveness scale (SRS). Autism Research 2008;1(6):354–63.
- Del Cole CG, Caetano SC, Ribeiro W, Jackowski AP. Adolescent adaptive behavior profiles in Williams–Beuren syndrome, Down syndrome, and autism spectrum disorder. Child Adolesc Psychiatry Ment Health 2017;11(1):40.
- 8. Fenton G, D'Ardia C, Valente D, Del Vecchio I, Fabrizi A, Bernabei P. Vineland adaptive behavior profiles in children with autism and

moderate to severe developmental delay. Autism 2003;7(3):269–87.

- 9. Paul R, Miles S, Cicchetti D, Sparrow S, Klin A, Volkmar F, et al. Adaptive behavior in autism and pervasive developmental disorder-not otherwise specified: Microanalysis of scores on the Vineland Adaptive Behavior Scales. J Autism Dev Disord 2004;34(2):223–8.
- 10. Tomanik SS, Pearson DA, Loveland KA, Lane DM, Shaw JB. Improving the reliability of autism diagnoses: Examining the utility of adaptive behavior. J Autism Dev Disord 2007;37(5):921–8.
- American Association on Intellectual and Developmental Disabilities. Intellectual Disability: Definition, Classification, and Systems of Supports, 11th ed. Washington, DC: AAIDD; 2010.
- 12. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV; 2000.
- 13. Leffert JS, Siperstein GN. Social cognition: The key to understanding adaptive behavior in individuals with mild mental retardation. International Review of Research in Mental Retardation 2002;25:135–81.
- 14. Anderson A, Locke J, Kretzmann M, Kasari C. Social network analysis of classrooms containing children with autism spectrum disorder: Predictors of fragmentation and connectivity in elementary school classrooms. Autism 2016;20(6):700–9.
- 15. Heyman M, Hauser-Cram P. The influence of the family environment on adaptive functioning in the classroom: A longitudinal study of children with developmental disabilities. Res Dev Disabil 2019;86:20–30.
- 16. Maleki M, Chehrzad MM, Kazemnezhad LE, Mardani A, Vaismoradi M. Social skills in preschool children from teachers' perspectives. Children (Basel) 2019;6(5):64.
- 17. Nazim A, Khalid R. Adaptive functioning correlates among children with Autism Spectrum Disorders. RMJ 2018;43(4):712–6.
- Shevell MI, Majnemer A, Webster RI, Platt RW, Birnbaum R. Outcomes at school age of preschool children with developmental language impairment. Pediatr Neurol 2005;32(4):264–9.
- 19. Shevell M, Majnemer A, Platt RW, Webster R, Birnbaum R. Developmental and functional

outcomes at school age of preschool children with global developmental delay. J Child Neurol 2005;20(8):648–53.

- 20. Tenerife JJ, Peteros E, Englatera JD, de Vera JV, Pinili LC, Fulgencio MD. Exploring predictors of adaptive behaviour of children with autism. Cypriot Journal of Educational Sciences 2022;17(3):772–86.
- 21. Harrison PL, Oakland T. Adaptive behavior assessment system – Second Edition. San Antonio, TX: Harcourt Assessment; 2003.
- 22. Damberga I, Raščevska M, Koļesovs A, Sebre S, Laizāne I, Skreitule-Pikše I, Martinsone B. Adaptive behavior in children with specific learning disabilities and language and intellectual impairments. Baltic Journal of Psychology 2014;15(1-2):87–103.
- 23. Ćalasan S, Drljan B. Adaptivno ponašanje kod dece sa razvojnim poremećajima. Baština 2022;32(56):495–511.
- 24. Gabriels RL, Ivers BJ, Hill DE, Agnew JA, Mc-Neill J. Stability of adaptive behaviors in middle-school children with autism spectrum disorders. Research in Autism Spectrum Disorders 2007;1(4):291–303.
- Jeremić M, Grujičić R, Pejović-Milovančević M. Adaptive capabilities of children with autism and their connection with neurophysiological correlates. Medicinski pomladak 2018;69(4):20–6.
- 26. Kenworthy L, Case L, Harms MB, Martin A, Wallace GL. Adaptive behavior ratings correlate with symptomatology and IQ among individuals with high-functioning autism spectrum disorders. J Autism Dev Disord 2010;40(4):416–23.
- 27. Mouga S, Almeida J, Café C, Duque F, Oliveira G. Adaptive profiles in autism and other neurodevelopmental disorders. J Autism Dev Disord 2015;45(4):1001–12.
- 28. Perry A, Flanagan HE, Geier JD, Freeman NL. Brief report: The Vineland Adaptive Behavior Scales in young children with autism spectrum disorders at different cognitive levels. J Autism Dev Disord 2009;39(7):1066–78.
- 29. Pugliese CE, Anthony LG, Strang JF, Dudley K, Wallace GL, Naiman DQ, et al. Longitudinal examination of adaptive behavior in autism spectrum disorders: Influence of executive function. J Autism Dev Disord 2016;46(2):467–77.

- 30. Sadrossadat L, Moghaddami A, Sadrossadat SJ. A comparison of adaptive behaviors among mentally retarded and normal individuals: A guide to prevention and treatment. Int J Prev Med 2010;1(1):34–8.
- 31. Santos S. Adaptive behaviour on the Portuguese curricula: A comparison between children and adolescents with and without intellectual disability. Creative Education 2014;7(5):501–9.
- 32. Sartawi A, AlMuhairy O, Abdat R. Behavioral problems among students with disabilities in United Arab Emirates. International Journal for Research in Education 2011;29:1–15.
- 33. Loucas T, Charman T, Pickles A, Simonoff E, Chandler S, Meldrum D, et al. Autistic symptomatology and language ability in autism spectrum disorder and specific language impairment. J Child Psychol Psychiatry 2008;49(11):1184–92.
- 34. Gulati S, Dubey R. Adaptive Functioning and Feeding Behavior: Key Targets in Autism Management. Indian J Pediatr 2015;82(8):671–2.
- 35. Dykens EM, Hodapp RM, Evans DW. Profiles and development of adaptive behavior in children with Down syndrome. Down Syndr Res Pract 2006;9(3):45–50.
- Schatz J, Hamdan-Allen G. Effects of age and IQ on adaptive behavior domains for children with autism. J Autism Dev Disord 1995;25(1):51–60.
- 37. Ben-Itzchak E, Zukerman G, Zachor DA. Having older siblings is associated with less severe social communication symptoms in young children with autism spectrum disorder. J Abnorm Child Psychol 2016;44(8):1613–20.
- Knott F, Lewis C, Williams T. Sibling interaction of children with autism: Development over 12 months. J Autism Dev Disord 2007;37(10):1987–95.

- 39. Matthews NL, Goldberg WA, Lukowski AF. Theory of mind in children with autism spectrum disorder: Do siblings matter? Autism Res 2013;6(5):443–53.
- 40. Matthews NL, Goldberg WA. Theory of mind in children with and without autism spectrum disorder: Associations with the sibling constellation. Autism 2018;22(3):311–21.
- 41. Ben-Itzchak E, Nachshon N, Zachor DA. Having siblings is associated with better social functioning in autism spectrum disorder. J Abnorm Child Psychol 2019;47(5):921–31.
- 42. Brewton CM, Nowell KP, Lasala MW, Goin-Kochel RP. Relationship between the social functioning of children with autism spectrum disorders and their siblings' competencies/problem behaviors. Research in Autism Spectrum Disorders 2012;6(2):646–53.
- 43. Rosen NE, McCauley JB, Lord C. Influence of siblings on adaptive behavior trajectories in autism spectrum disorder. Autism 2021;26(1):135–45.
- 44. Nievar MA, Luster T. Developmental processes in African American families: An application of McLoyd's theoretical model. Journal of Marriage and Family 2006;68(2):320–31.
- 45. Ibrahim N, El-abdeen A, Ng F, Zoromba M, Haikal A. Socio-economic and demographic factors associated with adaptive behaviour among children diagnosed with autism spectrum disorder in Egypt. Middle East Current Psychiatry 2020;27(1):1–5.
- 46. Peterson CA, Wall S, Raikes HA, Kisker EE, Swanson ME, Jerald J, et al. Early head start: Identifying and serving children with disabilities. Topics in Early Childhood Special Education 2004;24(2):76–88.

Prediktivni uticaj sociodemografskih karakteristika i tipa razvojnog poremećaja na adaptivna postignuća djece

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Uvod. Adaptivno ponašanje, koje uključuje konceptualne, socijalne i praktične vještine predstavlja ključni pokazatelj svakodnevnog funkcionisanja djece. Njegova procjena je od posebnog značaja u identifikaciji intelektualne ometenosti, ali i u sagledavanju razvojnih potencijala djece sa različitim razvojnim poremećajima i tipičnim razvojem. Cilj istraživanja bio je da se ispita prediktivna snaga sociodemografskih faktora i vrste razvojnog poremećaja u odnosu na adaptivna postignuća djece.

Metode. Istraživanje je sprovedeno na uzorku od 183 djece, uzrasta od 4 do 14 godina, koji su bili podijeljeni u četiri grupe: djeca sa razvojnim jezičkim poremećajem (RJP), poremećajem iz spektra autizma (PSA), lakom intelektualnom ometenošću (LIO) i djeca tipičnog razvoja (TR). Podaci su pri-kupljeni pomoću posebno konstruisanog upitnika i Dijagnostičke skale za procjenu adaptivnog po-našanja (ABDS).

Rezultati. Rezultati regresione analize pokazali su da je tip razvojnog poremećaja najsnažniji prediktor adaptivnog funkcionisanja u svim ispitivanim domenima. Broj braće i sestara se takođe pokazao značajnim prediktorom ukupnog adaptivnog skora i većine pojedinačnih domena, osim socijalnog. Porodični prihodi izdvojili su se kao značajan faktor u predviđanju konceptualnog domena.

Zaključak. Vrsta razvojnog poremećaja ima dominantan uticaj na adaptivna postignuća djece, dok pojedine sociodemografske varijable dodatno doprinose objašnjenju varijacija u adaptivnom ponašanju. Ovi nalazi ukazuju na potrebu za individualizovanim pristupom u procjeni i planiranju intervencija.

Ključne riječi: adaptivno ponašanje, razvojni poremećaji, sociodemografske karakteristike, djeca