

Kindergarten Teachers' Competences Regarding the Inclusion of Children with Autism Spectrum Disorder in Early Childhood and Preschool Education Institutions

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Abstract

The paper focuses on the analysis of the estimated competences of kindergarten teachers regarding the inclusion of children with autism spectrum disorders in early childhood and preschool education. Based on previous theoretical knowledge and experiences of kindergarten teachers, this paper estimates abilities and limitations of children with autism spectrum disorders, self-assessment of the competences of kindergarten teachers for their education and assessment of other conditions for the inclusion of children with autism spectrum disorder. The survey results obtained by a questionnaire distributed to 68 kindergarten teachers working in 6 kindergartens in the town of Split were analyzed. The findings showed a moderate level of knowledge about inclusion and low self-assessment of kindergarten teachers about their competences as active participants in the inclusion of children with a disorder from the autism spectrum. Factors which were found to impede the implementation of inclusive education of children with autism spectrum disorder include: insecure position of assistants in kindergartens, lack of competent kindergarten teachers, and insufficient cooperation with parents of children with autism spectrum disorder. The analysis points to a lack of systematic education and training of kindergarten teachers for inclusive educational practice. The authors emphasize the importance of knowledge and skills of kindergarten teachers in the

area of information and communication technology, particularly augmentative and alternative communication.

Key words: *children with autistic spectrum disorder; competence of the kindergarten teacher; inclusive education and teaching; information communication technology.*

Introduction

Multiplicity of definitions of inclusion are the result of complex processes present in various professional and scientific endeavors. The term inclusion has gained relevance and popularity following the development of the model of social inclusion, which encompasses broad social, legal and political values. Most authors (Avramidis & Norwich, 2002; Begeny & Martens, 2007; Bouillet, 2011; Brojčin, 2013; Cvetko, 2005; Cerić, 2008; Dixon, 2005; Igrić, 2015; Nes, Demo, & Ianes, 2017; Romstein 2010; Reddington & Price, 2017; Snow, 2001; Sunko, 2009; Vican, 2013; Zrilić & Blaslov, 2017, and many others) follow the pathways encompassing a wider version of inclusion. Respecting the right to diversity as a natural and necessary process is the cornerstone of the inclusion research. Definitions of inclusion in a narrower sense emphasize the development of social tolerance towards individual differences and individual needs of specific groups or of just one person. They are formed in the relationship between the styles and the ways in which a society or part of a social system, such as education, corresponds to the diversity of a particular member or part of a group. Individuality and identity are placed in a relationship of common affiliation with all people, with the right to meet the needs of identity as a predictor of diversity from other people. Many authors have recognized the importance of identity in an inclusive society (Farnell, 2012; Igrić, 2015; Maalouf, 2005; Stančić, Kiš-Glavaš, & Igrić, 2001; Sunko, 2010; Sunko & Lujan, 2011; Zrilić, 2013; Zuckerman, 2013), and have explored models and possibilities of education tailored to each child. The narrow definitions of inclusion are used for descriptions of precisely defined processes that have an impact on the projected goals. Both variants (narrower and broader) of inclusion definitions are committed to respecting diversity, because without diversity there is no identity.

Inclusion in educational institutions is not and cannot be homogeneous, because every child is unique in his/her special position surrounded by acceptance and appreciation, and living a life of diversity. The multidimensionality, sensitivity and complexity of educational inclusion issues is emphasized in addressing the needs of children with developmental disabilities, including children with autism spectrum disorder. Autism Spectrum Disorder (ASD) can be manifested as deviations in the field of social interaction and communication and as the presence of restricted and repetitive behaviors.

Autism Spectrum Disorder

The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1996), defines ASD as covering a wide range of neurodevelopmental disorders with three basic features: impairments or disorders in the field of social interaction,

difficulties in verbal and nonverbal communication, and the presence of restricted and repetitive, recurrent behaviors. The aforementioned factors that were established as diagnostic categories in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) included several subcategories (American Psychiatric Association, 1996; Bujas-Petković & Škrinjar, 2010; Wetherby & Prizant, 2000). The fifth edition of DSM (2013) determines many changes in ASD diagnostics. The first change relates to the introduction of a single term: autistic spectrum disorders, which simultaneously includes and eliminates the above-mentioned subcategories. Most scientists believe that ASD disorder subcategories have different degrees of severity of the symptoms (American Psychiatric Organization, 2013; Grant & Nozyce, 2013). The second change in ASD recognition in comparison with previous diagnostic materials refers to distinguishing three levels of symptom severity, where each level is associated with a description of the appropriate quantity (level) of support. The third change concerns the presence and recognition of symptoms in the area of *social interaction* and *communication*. Descriptive symptoms in DSM-V materials were formed in a single domain called “social communication”. Difficulties in social communication are recognizable at the level of mutual and personal interaction. In addition, there are restricted and repetitive patterns of behavior, interests and activity. Children with ASD have difficulties in attributing mental states to themselves and/or to other people (Škrobo, Šimleša, & Ivosac Pavliša, 2016; Tager-Flusberg, 2007), and also in understanding the social environment, which is, for them, unpredictable and incomprehensible, and consequently has impact on their social relationships. The closest ASD category can only be determined after a longer period of tracking, which, according to Aleksić (2001), is often lacking.

Communication with the Help of Technology

The right to communication is one of the fundamental human rights. Biological factors, mental and intellectual abilities, the personality of an individual are elements of communication development. Most children with ASD cannot verbally communicate in the way most people do. Given their special needs, they are called children with complex communication needs. Sunko, Jukić, and Puljić (2015), after sensory disintegration analysis in a child with ASD, concluded that auditory stimuli can be better integrated with the use of motor-based stimuli. This research result presents a challenge in the development and implementation of auditory-motor procedures based on the child’s existing abilities and needs in order to improve the child’s overall functioning. The methods and modes of communication that assist and/or replace their speech, language and/or writing require the use of *assisted communication*.

The term “alternative and augmentative communication” (AAC) was defined by the International Society for Alternative and Augmentative Communication (ISAAC). Alternative and augmentative communication is used by people and children with disabilities, who have never been able to use speech intelligible to their surroundings,

both in receptive and expressive speech. Alternative and augmentative communication is intended for children with complex communication needs who cannot engage in spoken language and/or who have difficulties understanding their language. These are mostly children with multiple disorders, and among the most prominent are the children with ASD (Car, 2007; Ivšac Pavliša, 2012). Speech and writing are not the only ways of communication, because we can use nonverbal communication: gestures, mimics, objects and their symbols. Forms of communication that complement or completely replace speech are achieved by combining graphic, pictorial, photographic elements, or using symbols representing beings, objects, appearances, actions as forms of alternative and augmentative communication (AAC). New technologies are increasingly being used to facilitate AAC using alternative means and enhancement (augmentation) of the existing technologies.

Competences of Kindergarten Teachers

The National Curriculum for Early Childhood Education (2014) in the Republic of Croatia emphasizes knowledge, humanism and tolerance, responsibility, autonomy, creativity and identity as the core values for the purpose of overall and personal development. Value-building factors are numerous, most of them being conditioned by the transfer of values from adults to children. For example, Ferić (2009) and Visković (2013) point out the importance of consistent behavior of parents and kindergarten teachers (adults) as well as the choice of values that are transmitted to children. The kindergarten is the first place, apart from family, where children are socialized and where social values and attitudes are transmitted. Teaching activities listed in the early childhood education curriculum in the Republic of Croatia are based on an inclusive model that goes beyond any diagnostic medical criteria and emphasizes the child's functional abilities (the social model). The competences of kindergarten teachers encompass a variety of constructs, abilities and skills, and the personality of the kindergarten teacher. When referring to competences, Bouillet (2011) indicates integrated implementation of understanding, skills and value systems in professional practice. The formation of social identity with the goal of social welfare affects the quality of the overall relationship between the participants of the educational process from the earliest days, which directly influences the increased social expectations of kindergarten teacher's higher professional competences. By examining the competences of kindergarten teachers, many authors (Bouillet, 2011; Loborec & Bouillet, 2012; Miloš & Vrbić, 2015; Skočić Mihić, 2011; Sunko, 2009) emphasize the importance of their role in the successful realization of inclusive values. The investigations show kindergarten teachers' low estimates of their own competence for working with children with developmental disabilities, while at the same time they express a high level of awareness of the specifics of the difficulties requiring the cooperation between all participants in the educational and rehabilitation process and adaptation of approaches for a more successful achievement of inclusive values. Since

the digital world is becoming increasingly involved in the communication of today's children, Rogulj (2014a) points to the pronounced need for education in the field of proper technical, ethical and moral use of technology. It is necessary to guide children from the earliest age, and kindergarten teachers' competences play an important role in this. Information and communication technologies not only support the acquisition of new and basic skills, but also support lifelong learning of kindergarten teachers.

Research Problem and Aim

In addition to the required knowledge and skills expected from the kindergarten teacher, it is important for them to have positive attitudes towards inclusion of children with developmental difficulties as full members of the kindergarten class, which is also an important segment of their teaching competences. Otherwise, prejudice and inadequate competences of kindergarten teachers may have an adverse impact on the overall development of all the children in the class. The developmental nature of ASD and insufficiently substantiated and unfounded early diagnosis of this disorder additionally contribute to kindergarten teachers' low self-evaluation of their own competences.

The purpose of this paper is to identify the differences in the opinions of kindergarten teachers about the inclusion of ASD children in terms of kindergarten teachers' years of service and their work experience with children with ASD. It is assumed that there is a statistically significant difference in their attitudes about the inclusion of children with ASD in terms of kindergarten teachers' years of service and their experience in working with children with ASD. In the statistical analysis, hypothesis was tested by using the techniques of univariate (percentages) and bivariate correlation (Spearman's rho).

Methodology

Research Instruments, Place and Time

An anonymous questionnaire called KORDA (Competences of Kindergarten Teachers for Working with Children with Autism) was used in the survey. The questionnaire was conceived as a battery designed and tailor-made for the purpose of testing the competences of kindergarten teachers working with children with ASD. Reliability of the KORDA questionnaire was determined by using the Cronbach's alpha coefficient ($\alpha = .736$), which is acceptable for this type of test. The survey was conducted in April and May 2017 in kindergartens in the city of Split. Convenience sampling was applied in the selection of kindergartens. The first part of the questionnaire examined the demographic characteristics of the participants: gender and age structure, years of service, knowledge of the structure and personal experience in working with children with ASD, and knowledge of the inclusion concept. In the questionnaire, the participants were supposed to indicate numerically their age and years of service. For the purposes of this paper, the age structure of the

respondents and their years of service were divided into two categories (lower and higher chronological age and more and less work experience). The second part of the questionnaire consisted of 35 statements which were estimated on a three-point Likert type scale with a zero point. Respondents expressed their level of (dis)agreement with the statements in the following way: 1 = I disagree; 2 = I neither agree nor disagree; 3 = I agree. The scale was designed for the purpose of examining kindergarten teachers about their personal competence: their self-assessment of competences for working with children with ASD, their views on inclusive education system, involvement of parents in the inclusion of a child with ASD and the behavior of a child with ASD in a kindergarten class.

Research Participants

The measuring instrument was distributed directly to kindergarten teachers with the help of professional teams. Out of a total of 100 distributed questionnaires, 68% were collected, of which 4% were not filled out correctly. All participants were females. The mean age of the respondents in the sample was 42 years ($SD = 11.52$), and the age range was from 22 to 64 years. The average work experience of the respondents was 18.96 ($SD = 8.64$). In this sample, most (98.5%, 67) kindergarten teachers were familiar with the term ASD. A smaller number of the respondents had experience in working with children with ASD (38.3%, 26), while 52.9% (36) had no experience in working with children with ASD, and 8.8% (6) kindergarten teachers did not answer this question. Most participants (92.6%, 63) responded to the open-ended question relating to inclusion. The obtained answers were classified into the categories of those who reported one or more inclusive values, with 53.1% (17) kindergarten teachers with more years of service and 50% (15) with less. More than one third of respondents (37.5%, 12) provided descriptions that did not address the dimensions of inclusion. Most of the kindergarten teachers' responses included broader social values in the definition of inclusion.

Results and Discussion

Out of a total of 35 items, 4 subscales were formed. The subscale Self-assessment of one's own competences for the implementation of inclusive education is composed of 8 items. Another set of 8 items are included in the subscale Objective inclusion settings, 3 items are associated with Parental involvement in the inclusion of children with ASD and 8 items describe the Tendency of kindergarten teachers towards ASD. The data shown in Table 1 are selected from all 35 items according to the size criterion from the obtained frequencies and percentages in terms of years of service.

The results for Item 1: I find myself competent to work with a child with ASD, show that most kindergarten teachers feel that they are not competent to work with children with ASD. However, a small number of kindergarten teachers in the older age group (6.2%, 2) considered themselves competent for working with children with ASD. The

results in the present study differ from the ones obtained by Bouillet (2011), Loborec and Bouillet (2012) and Sindik (2013), according to which, kindergarten teachers with more years of service were estimated as more competent than those with fewer years of service. These studies investigated the inclusion of all children with developmental disabilities and children with ADHD, while this research looked into the competences of kindergarten teachers for working with children with ASD.

In order to achieve a higher level of competence, additional education and training of kindergarten teachers who work with children with ASD is required, for which the readiness (Item 9) was expressed more by younger kindergarten teachers (81.3%, 26) than the older ones (56.3%, 18). The result confirms the findings of earlier research (Boe et al., 2007; Booth & Anscow, 1998; Jurčević-Lozančić & Kudek-Mirošević, 2015), but also indicates long-term lack of competences, as well as the need for additional education of kindergarten teachers. Addressing this issue requires a perception of the inequality and imbalance of developmental functions in children and imprecise diagnosis, which in turn contributes to the insecurity and unwillingness of kindergarten teachers to work with children with ASD.

The correlation coefficient of the variable years of service (YS) with Items 1 and 9 (Ready for additional education in the field of working with children with ASD) indicates negative correlation (Table 1). The correlation coefficient result shows that YS as the predictor variable is not related to item 1 (for Item 1: $r_{YS} = -0.13, p \leq 0.05$). In a few cases where a statistically significant correlation was identified, there was a low level of interdependence, as in the example of the correlation of years of service with Item 9 ($r_{YS} = -0.32, p \leq 0.05$). The result confirms the necessity of lifelong learning in the professional field to obtain competences to work with children with ASD because formal education cannot provide all the necessary competences with regard to the individual development of each child and the need for inclusion of children with ASD.

Correlation was not determined ($r_{EASD} = 0.15, p \leq 0.05$) between the teachers' experience in working with children with ASD (EASD) and item 15 (Inclusion of children with ASD from kindergarten teachers' point of view requires extraordinarily increased work activities). The high frequencies and percentages indicate that kindergarten teachers, regardless of the length of years of service in kindergarten and experience in working with children with ASD, believe that an inclusive approach by kindergarten teachers requires extraordinarily increased work activities (item 15). The opinion of kindergarten teachers that inclusion of a child with ASD in a regular class changes the rhythm of work in kindergarten (item 19) ($r_{YS} = 0.14; p \leq 0.01$) and that preparation of other children as an important prerequisite for successful inclusion (Item 34) are not related to the length of service ($r_{YS} = 0.12; p \leq 0.01$).

Inadequate competences of kindergarten teachers are necessarily linked to the knowledge and skills of using new technologies, particularly in the field of alternative and augmentative communication. Technology is progressing every day. In the near future, even faster development of technology is expected. The information and ways

of communication are more accessible than ever before. Therefore, kindergarten teachers need training in acquiring competences for working with new technologies (Rogulj, 2014b) in order to be able to satisfy the basic rights of all children to communicate, including children with ASD. Access to new media and the creation of different opportunities and ways to embrace and transmit information enhance kindergarten teachers' competences.

Assistive technology refers to a variety of technological products, parts of equipment or systems used as auxiliary, adaptive and rehabilitative aids for children with disabilities. Low- and high-tech tools (hardware, software and other peripheral devices) help children with complex communication difficulties to express themselves, but also to understand language and communication as a whole (Ivšac Pavliša, 2010). Contemporary research (Dukarić, Ivšac Pavliša, & Šimleša, 2014; Škrobo, Šimleša, & Ivšac Pavliša, 2016) has shown that children with ASD find it difficult to adapt to regular preschool programs and they are frequently left without any form of early intervention and education due to their developmental difficulties in the field of communication. Lack of equipment, toys and didactic materials as well as training of kindergarten teachers in this area increases the risk of exclusion of children with ASD from the institutions of early childhood and preschool education.

Comparing the years of service with the listed items (Table 1), the same number and percentage of kindergarten teachers believe that children with ASD should not be segregated into special institutions. However, a relatively larger number of younger kindergarten teachers (50%, 16) than the older ones neither agreed nor disagreed with item 4 (ASD children should be educated in special institutions), while some (18.8%, 6) older kindergarten teachers believe that children with ASD should be segregated, as opposed to a smaller number of young teachers (9.4%, 3). The results show the insecurity of the kindergarten teachers in the implementation of inclusion of children with ASD with minimal differences in attitudes of kindergarten teachers with fewer and more years of service (Item 24: For children with ASD it is necessary to organize part of the work in the regular group and part in the special group). Correlation coefficient scores (item 24, $r_{YS} = 0.08$ and $r_{EASD} = 0.14$, $p \leq 0.01$) show that there is no correlation between years of service and the current experience with children with ASD. These results differ from those of recent studies related to the broader inclusion environment (Jurčević-Lozančić & Kuderk-Mirošević, 2015; Miloš & Vrbic 2015; Sunko, 2010), whose research was related to children with ASD, but they confirm the results of a more recent study (Visković & Višnjic Jevtić, 2017), which showed that kindergarten teachers believe that during their formal education they have not developed their competences adequately, and that the development of their competences is not related to the level of formal education, age and years of service. The results of earlier research have shown that some children with developmental difficulties find it difficult to adapt to regular preschool programs, and have often been excluded from any form of early intervention and education (Ivšac Pavliša, 2010;

Table 1
Kindergarten teachers' attitudes towards inclusion

STATEMENT	Level of agreement								Correlation coefficient	
	Disagree		Neither agree nor disagree		Agree		No reply		rho	
	f	%	f	%	f	%	f	%	rYS	rEASD
1. I find myself competent to work with a child with ASD.	15	46.9	17	53.1	0	0	0	0	-0.13** p≤ 0.05	
	16	50	13	40.6	2	6.2	1	3.1		
4. Children with ASD should be educated in special institutions.	13	40.6	16	50	3	9.4	0	0		
	13	40.6	12	37.5	6	18.8	1	3.1		
9. I'm ready for further education to work with ASD child.	2	6.2	4	12.5	26	81.3	0	0	-0.32* p≤ 0.05	
	5	15.6	9	28.1	18	56.3	0	0		
10. Inclusive access for children with ASD requires an assistant.	0	0	3	9.3	29	90.7	0	0		
	0	0	2	6.2	29	90.7	1	3.1		
11. Kindergartens lack experts to educate children with ASD.	3	9.4	2	6.2	27	84.4	0	0		
	1	3.1	3	9.4	28	87.5	0	0		
12. For educating ASD children cooperation of teachers with the professional services is the most important.	1	3.1	5	15.6	26	81.3	0	0		
	0	0	4	12.5	28	87.5	0	0		
15. Inclusion of ASD children requires extremely increased work activities from educators.	0	0	1	3.1	31	96.9	0	0	-0.08* p≤ 0.01	0.15* p≤ 0.05
	0	0	2	6.2	30	93.8	0	0		
19. Inclusion of ASD child changes the overall rhythm of work in a kindergarten class.	0	0	7	21.9	25	78.1	0	0	0.14* p≤ 0.01	
	0	0	6	18.7	26	81.3	0	0		
23. ASD children disturb implementation of activities in the regular class.	8	25	18	56.3	5	15.6	1	3.1	0.26** p≤ 0.05	-0.11** p≤ 0.05
	2	6.2	21	65.6	9	28.2	0	0		
24. For children with ASD it is necessary to organize part of the work in a regular class and part in the special class.	6	3.1	9	28.1	22	68.8	0	0	0.08* p≤ 0.01	0.14* p≤ 0.01
	1	3.1	8	25	23	71.9	0	0		
27. The inclusion of ASD child in a regular group adversely affects the socialization of other.	26	81.3	5	15.6	1	3.1	0	0		
	20	62.5	9	28.1	3	9.4	0	0		
30. A child with ASD shows characteristics of asocial behavior always and everywhere.	0	0	2	6.2	29	90.7	1	3.1		
	0	0	2	6.2	30	93.8	0	0		
33. ASD children are violent towards other children.	14	43.8	15	46.9	1	3.1	2	6.2		
	10	31.3	22	68.7	0	0	0	0		
35. Parents of ASD children gladly participate in kindergarten activities together with other parents.	2	6.2	26	81.3	3	9.4	1	3.1		
	1	3.1	24	75	7	21.9	0	0		
34. Successful inclusion of ASD child is aided by the prior preparation of other children in the class.	0	0	8	25	23	71.9	1	3.1	0.12* p≤ 0.01	
	0	0	6	18.7	26	81.3	0	0		

Sunko, 2010). The test results show that kindergarten teachers mostly expressed the opinion that children with ASD should be included in groups together with other children. All studies have shown that children with ASD are increasingly involved in early childhood and preschool education together with other children. A persistent opinion of some kindergarten teachers is still influenced by the exclusion model in which children are assessed on the basis of difficulties, rather than opportunities.

Generally, implementation of inclusion depends on technical and organizational aspects, and the results of this study (Table 1) show that kindergarten teachers, regardless of the length of their years of service, believe the complicating factors for the implementation of inclusive education in kindergartens are: unresolved position of the assistants who work individually with children in kindergartens (Item 10), lack of experts in child care for working with children with ASD (Item 11), and that for a successful inclusion of children with ASD appropriate space and required didactic materials need to be ensured (item 25). Members of kindergarten professional team provide direct support to a child with ASD, helping him/her in the group interaction between children and kindergarten teachers (Trnka & Skočić-Mihić 2012). A perennial shortage of experts and an indefinite legal framework for including and recruiting assistants in early childhood and preschool institutions is causing ongoing difficulties in ensuring inclusive processes. For the implementation of procedures for selecting, observing, and inspecting toys and other didactic contents, teamwork, adequate space and didactic materials are needed, especially for children with ASD, for whom the materials are conditioned by individualized approaches adjusted to each child's needs.

Kindergarten teachers consider cooperation with parents important for education of a child with ASD. However, according to the results of the present study, this cooperation seems to be insufficient. When evaluating the success of cooperation between kindergarten teachers and parents of children with ASD (Item 35), only 9.4% (3) of teachers with less work experience and 21.9% (7) of those with more work experience have rated co-operation with the parents of children with ASD as successful. This result points to the need for greater cooperation and partnerships between kindergarten teachers and parents, not only in early childhood and preschool institutions, but also in involving other institutions with which parents of children with ASD need to cooperate. The role of kindergarten teachers is neglected in the system of collecting data about children and in the use of experience and evidence-based intervention. Teamwork in the institutions within a community where kindergarten teachers are not sufficiently included loses influence and importance because their key role in preserving diversity and implementing inclusive values is lacking.

The results (Table 1) show that most kindergarten teachers are indecisive in their opinion on Item 23 (Children with ASD interfere with the implementation of activities in a regular kindergarten class), but they also show that kindergarten teachers with more years of service agree more with this statement than those with fewer years of service. It is important to remember that formal education and the beginning of

professional teaching for kindergarten teachers with more years of service (twenty years and more) was not directed towards processes that enable the achievement of inclusive values and therefore emphasis needs to be on the importance of lifelong learning at all levels, regardless of age and work experience of the respondents. Correlation between this item and the variables of previous work experience with children with ASD and years of service was calculated. The correlation coefficient result between the previous experience of kindergarten teachers working with children with ASD and Item 23 did not show correlation ($r_{EASD} = -0.11, p \leq 0.05$), while the result of the correlation coefficient of years of service and Item 23 showed almost insignificant correlation ($r_{YS} = 0.26, p \leq 0.05$).

The result of the analysis between Item 23 (Children with ASD interfere with the implementation of activities in a regular kindergarten class) and Item 27 (Inclusion of children with ASD in a regular group does not negatively affect the socialization of other children) shows that the correlation between the variables generated by case action is greater than 1% ($r = 0.34, p \leq 0.01$). The result indicates a slight correlation among the variables. The correlation coefficient result also does not show the correlation of Item 23 (Children with ASD interfere with the implementation of activities in a regular kindergarten class) and Item 33 (Children with ASD are often violent towards other children) - $r = 0.24, p \leq 0.05$. Most kindergarten teachers neither agreed nor disagreed with Item 23, while 8 (25%) teachers with fewer years of service and 2 (6.2%) with more years of service disagreed, and 5 (15.6%) kindergarten teachers with fewer and 9 (28.2%) with more years of service agreed with this statement. On the other hand, a total of 46 (71.9%) kindergarten teachers do not think that inclusion of a child with ASD negatively affects the socialization of other children in the group (Item 27). With regard to the other two items (Items 23 and 33), more than half of the kindergarten teachers were undecided, although 26 (40.6%) said that children with ASD do not express the characteristics of undesirable behavior always and everywhere, and 24 (37.5%) teachers do not think children with ASD are often violent towards other children. The result suggests that, in the opinion of kindergarten teachers, children with ASD do not show forms of unacceptable behavior, they can follow the rules of conduct, and their inclusion in regular kindergartens does not adversely affect the socialization of other children.

Conclusions

Means of augmentative communication, with which kindergarten teachers should be familiar, are necessary for teachers to acquire knowledge and skills in order to meet the needs of all children in their educational groups, as well as to be aware of modern technologies needed for lifelong learning. The descriptive term ASD, used by professionals in different fields, has been assigned characteristics related to unclear developmental difficulties, which are first encountered by insecure parents, and which can strongly influence the consolidation of kindergarten teachers' negative attitudes

about the inclusion of children with ASD, or a change of acceptable attitudes towards the refusal.

The results of the research show that kindergarten teachers mostly see themselves to be insufficiently competent for working with children with ASD in their opinion, the reasons for insufficient competence are inadequate lifelong education, continuous lack of assistants and professional support, and insufficient cooperation with parents. Without continuous cooperation and partnership with parents, as well as coordinated work and teamwork of other institutions within the community, the role of kindergarten teachers in implementing ideas and approaches to the education of children with ASD remains on the margins of the educational process.

Given the set objective of this paper, the analyzed results show that there is no statistically significant difference in the attitudes of kindergarten teachers towards the inclusion of children with ASD in terms of kindergarten teachers' years of service and their having experience in working with children with ASD.

The results also indicate that kindergarten teachers with more years of service believe, more frequently than their colleagues with fewer years of service, that children with ASD interfere with the implementation of activities in kindergartens. The result additionally confirms insufficient motivation in the group of more experienced kindergarten teachers for the inclusion of children with ASD. Furthermore, experience in working with children with ASD was not found to cause significant differences in the attitudes of the teachers who have had such experience compared with the ones without the experience in working with children with ASD.

Mastering the organizational and technical aspects such as cooperation with the expert team and parents, designing appropriate activities, organizing space and providing social support, the possibility and ways of using ICT to communicate better with children with ASD seemed to motivate and strengthen the sense of competence of kindergarten teachers for the inclusion of children with ASD. Representing challenges and incentives for new forms of development and processes, these activities are necessary to ensure inclusive practices in the areas of social communication and interaction of all children.

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Kompetencija odgajatelja u inkluziji djece s poremećajem iz spektra autizma u dječjim vrtićima

Sažetak

Rad je usmjeren na analizu procjene uvjeta za inkluziju djece s poremećajem iz spektra autizma u programe ranog i predškolskog odgoja i obrazovanja od odgajatelja dječjih vrtića. Uvjeti se odnose na procjenu dosadašnjih teorijskih znanja i iskustava odgajatelja, procjenu sposobnosti i ograničenja djece s poremećajem iz spektra autizma, samoprocjenu kompetencija odgajatelja za njihov odgoj i obrazovanje i procjenu ostalih uvjeta za inkluziju djece s poremećajem iz spektra autizma. Analizirani su rezultati istraživanja dobiveni upitnikom od 68 odgajatelja iz 6 splitskih dječjih vrtića. Utvrđena je srednja razina znanja o inkluziji i niska samoprocjena odgajatelja o njihovoj kompetenciji u kojoj su oni aktivni sudionici inkluzije djece s poremećajem iz spektra autizma. Otežavajućim faktorima za provedbu inkluzivnog odgoja djece s poremećajem iz spektra autizma procijenili su: nedosljedno osiguranje pomoćnika u vrtiću, nedostatak stručnjaka kompetentnih za odgoj i nedovoljnu suradnja s roditeljima djece s poremećajem iz spektra autizma. Analiza upućuje na nedostatak sustavne edukacije odgajatelja za inkluzivnu odgojno-obrazovnu praksu. Autorice izlučuju važnost znanja i vještina odgajatelja u području informacijsko-komunikacijske tehnologije, a posebno augmentativne i alternativne komunikacije.

Ključne riječi: *augmentativna i alternativna komunikacija; djeca s poremećajem iz autističnog spektra; informacijsko-komunikacijska tehnologija; kompetencija odgajatelja; odgojno-obrazovna inkluzija.*