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FUNCTIONAL ABILITIES OF CHILDREN WITH DISABILITIES INCLUDED IN MAINSTREAM SCHOOLS

Abstract

Including students with disabilities into mainstream school serves as a means of implementing human rights. However, simply being included does not guarantee high participation in structured activities. Individual participation in different school activities depends of the functional abilities of each student. Self-efficacy refers to belief in ones capabilities to carry out the courses of action needed for desired goals, considering students with disabilities self-efficacy beliefs may be critical determinants.

Main goal of our research was to determinate the functional abilities of students with disabilities included in mainstream schools. The research included 64 examinees, students with different types of disabilities included in regular schools. All examinees were assessed using the school occupational therapy evaluation.

Analyzes of the results indicates that the school functioning of the children with disabilities depends on the organization of the materials, noise in the class and the number of peers in the classroom. Most of them need help with undressing and dressing when going to the toilet as well as toilet hygiene. Students with disabilities also have shown problems in spatial orientation in the school as well as finding different objects in the classroom.

In order to succeed in school activities, students need to be able to regulate their behavior, exercise control over their learning, and manage their learning environment.

Key words: functional abilities, inclusion, disabilities

Introduction

Recent decades have seen increasing emphasis placed on rights and inclusion in relation to disability. Including children with special educational needs in mainstream rather than specialised educational settings is increasingly considered to be ―both in their best interest and their right‖, according to Cumming and Wong (2010). Farrell (2000, cited in Ferguson, 2014) argues that the right to choose is important because for some children, there is still a need for special provision as children may benefit from occupational therapy, speech and language therapy and/or nursing care that is not available in mainstream schools (Sunday Business Post, 2012). Inclusive schools are established primarily for improving the special children's learning and development. Specifically, inclusion aims to benefit special children through improvements in their learning outcomes, including their social skills, academic achievement and personal development (Ainscow, 1991).

Indeed, inclusion illustrates an almost perfect educational system. However, is there any proof that these aims were successfully attained? A number of studies deal with the inclusion of children with certain disabilities in general education classrooms. The final decision whether or not to place special needs students in mainstream schools must be made after careful consideration of all concerned participants: teachers, parents, school administrators, students, as well as the society at large (Lan Wang, 2009).

The impact of additional needs on children‘s early school experiences is critical in helping to establish either positive or negative educational trajectories of school engagement and achievement. It is therefore essential to gain an understanding of the varied influences that shape the learning experience of the diverse population of children with disabilities (Bronfenbrenner & Morris, 1998). The period of middle childhood, when children attend primary school, has been recognised as a time of pivotal importance for psychological and emotional development (Colle & Del Giudice, 2011 cited in AEDC, 2014). Knowledge and experience begin to inform understanding of and participation in complex social organisation, and peer relationships begin to play a larger role as children move outside their nuclear families. Children begin to develop more sophisticated cognitive skills including

increased executive function and hence capacity for planning, behaviour regulation, focussed attention, and self-control (Collins, 1984). School provides a significant platform for children‘s academic, psychological, emotional and physical development (Fiscella & Kitzman, 2009; Hauser-Cram et al., 2007). Defining what it means for a child to be functioning well at school is complex and multifaceted (AEDC, 2014). Relatively few studies have presented data on the primary school outcomes of children with disabilities, and they have reported poorer outcomes for primary-level children with disabilities, when compared to their peers. These include decreased school engagement, increased bullying, compromised social relations due to disruptive behaviours, and lower academic achievement overall amongst later primary school age children (Forrest et al., 2011). Children with different types of disabilities require individualized support across multiple environments to promote participation, quality of life, and developmental outcomes. Support to enhance participation is based largely on individual profiles of functioning (e.g., communication, cognitive, social skills, executive functioning, etc.), which are highly heterogeneous within medical diagnoses (Klein, de Kamargo, 2018). The field of disability has shifted its focus to a transactional, dimensional-based biopsychosocial approach, focusing on functioning and participation in individuals with disabilities (Rosenbaum et al., 2014). The School Function Assessment (SFA) (Davies et al., 2004) involves a standardized questionnaire completed by teachers and other school based staff that measures elementary students‘ participation, skills, and supports in place. The SFA is meant to be used for screening, program planning, and reevaluation.

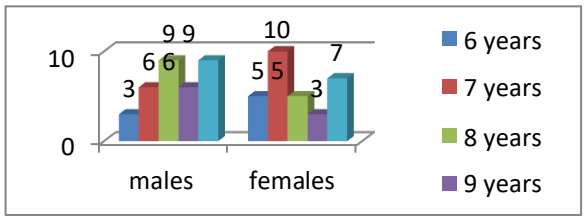
Methodology

Following the world trend of including children with disabilities in mainstream schools, in our country Republic of Macedonia starting from September 2019 year there is total inclusion of children with disabilities. In order to provide full and maximal participation of students with disabilities in all activities, it is necessary to assess their functional abilities. Main goal of our research was to determinate what are the functional abilities of students with disabilities, indicating if all of included students should visit mainstream schools, and more exactly if there are all needed supported services. The research was conducted on 64 examinees aged 6 to 11 years included in

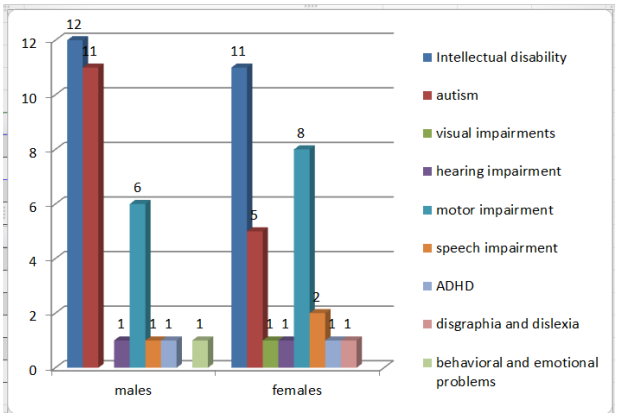
mainstream schools. For data collection we used school occupational performance evaluation, consisted of 8 domains: environment factors, self-care, student role and interaction abilities, academic and processing skills, play, societal integration, graphical communication and pre-writing skills. All categories were assessed with 5 graduated scale indicating independence, need of minimal assistance, moderate assistance, maximal assistance and complete dependence (Gioia, Isquith, Guy, 2000). Obtained data were analyzed using the descriptive statistics and chi square test for hypothesis testing.

Results

In this part we will discuss some of the obtained data. At the beginning we will present demographic information. 33 of the examinees are males and 30 females, eight are six years old, sixteen are at the age of 7, fourteen have eight years, nine were 9 years old and sixteen were at the age of 10 years. Regarding the type of disability, 23 were with intellectual disability, 16 examinees with autism spectrum disorder, two with hearing impairments and ADHD, 14 examinees with motor impairments, three have speech impairments, and one with visual impairment as well as dysgraphia and dyslexia (Pictures 1 and 2).



Picture 1. Gender and age distribution



Picture 2. Gender distributions of different types of disabilities

Table 1. Environmental factors that impact student‘s functioning

Environmental factors	no impact	%	minimal impact	%	significant impact	%	total
physical outlook	44	70	12	19	7	11	63

organization of materials	20	32	14	22	29	46	63
accesability	26	41	19	30	18	29	63
noise	25	40	13	20	25	40	63
visual stimulation	25	40	19	30	19	30	63
lightening	36	57	11	18	16	25	63
number of other present persons	24	38	18	29	21	33	63
temperature	43	68	9	14	11	18	63

Considering the environmental factors that impact the normal functioning of the students can be noticed that in most of the students, in 29 examinees significant impact has organization of the materials, in 25 students noise is key factor in the classroom and for 21 students important is the number of other persons in the classroom (table 1.).

Table 2. Self-care abilities

self-care	independent	minimal assistance	moderate assistance	maximal assistance	dependent
appropriate use of cutlery	41	11	6	4	1
open food disposals	41	11	4	2	5
handles and carries a tray	27	15	9	5	7
f dressing and undresing i	37	15	5	0	6
toalet hygiene	32	20	3	1	7
take on-of shoes	28	19	9	3	4
unbotton	21	21	5	5	11
zipping	29	14	6	7	7
tying	14	13	14	2	20
find objects in class	35	14	8	1	5
find school premises	37	15	7	1	3
appropriate use of school	26	17	11	2	7
prepare backpack	25	18	7	8	5
takes out, collects and retu	27	15	11	7	3
postural transitions	42	10	6	2	3

Assessment of the self-care abilities indicates that students with disabilities are at most dependent in tying their shoes and second most numerous category in dependency is buttoning (Table 2). 11 of 63 examinees in total need minimal assistance during the meals regarding the appropriate use of the cutlery as well as opening food disposals, 6 need moderate assistance. 15 students with disabilities need minimal help for caring tray, nine of them need moderate assistance. There are also 15 students that need minimal assistance in dressing and undressing while toileting, 20 of them need help in toilet hygiene, meaning that they are not able to go to the toilet by themselves. 18 examinees need minimal assistance during preparation of the backpack, 28 have problems finding certain objects in the classroom and 26 have problems finding different premises in the school. Regarding the student‘s role, 30 need help in pencils sharp, among which 12 are fully dependent, 9 of 17 needs minimal assistance in opening and closing markers, 38 examinees cannot color within the lines, according their age, 45 examinees have problems in templates usage, and 39 need help in handling scissors (Table 3).

Table 3. Student role

student role	independent	minimal assistance	moderate assistance	maximal assistance	dependent
sharp pencils	33	6	8	4	12
opens and closes markers	46	9	4	2	2
colors within the lines acc	25	11	10	4	13
uses templates	18	13	13	8	11
handle scissors	24	15	4	10	10
modifies behavior in line w	14	19	7	10	13

Discussion

Eriksson, Welander and Granlund (2007) during one school day, examined participation in everyday school activities for 66 children, 33 children with disabilities and without disabilities. The results showed that children with disabilities have lower participation both in structured and unstructured activities which correlates with findings in our study, where student‘s participation depends on the accessible levels of support. The difference in participation for children with and without disabilities is context specific; it indicates that professionals need to consider context specificity in developing interventions to increase participation. Leonard et all. (2002) assessed Functional status of school-aged children with Down syndrome, findings show that scores increased across all age groups ($P < 0.0001$), even relative to normative data and performance was strongest in the transfer and locomotion domains and weakest in social cognition. Comparing to results that we obtained we can conclude that beside social cognitive problems we also have lower scores in complex and fine motor abilities. Ying-Chia Kao et all. (2013) compared the functional performance of children with autism spectrum disorders (ASDs), intellectual and developmental disabilities (I/DD), and without disabilities using the revised PEDI Social/Cognitive, Daily Activities, and Responsibility domains. Results indicate that there were no significant differences between children with ASDs and I/DD. The ASD group demonstrated significantly lower performance than children without disabilities across the three domains at 10 and 15 years.

Conclusion

In our study as well as across the literature, study limitations contribute to difficulty interpreting the findings. One frequent limitation is small sample sizes. Extreme variation in a few participants may significantly influence results based on small samples. Also it is difficult to separate domains of functional abilities, since many observable life situations require multiple skills. A functional and dimensional approach of developmental pathologies could also permit a better understanding of

interindividual differences within syndromes that are maybe as important as between syndromes (Plumet et al., 1998).

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