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Assessing the Social, Emotional, and Behavioural Functioning of Greek Students with Mild Special Educational Needs using TOCA-C

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Abstract: ***Students with mild educational needs, regardless of their characteristics or difficulties, should have equal chances to learn. The present study used the Greek version of the "Teacher Observation of Classroom Adaptation-Checklist" (TOCA-C) scale. Research was conducted in the prefecture of West Macedonia in Greece. The majority of the sample consisted of 350 participants. Cronbach's α values were acceptable for all scales and subscales. The importance of this intervention can be seen in improving concentration, prosocial behaviour, internalizing problems, and improving parent-teacher relationships. The results indicate that the TOCA-C is a reliable, efficient, and effective tool for use in primary school settings.***

Keywords: TOCA-C scale, Concentration problems, Disruptive behaviour, Prosocial behaviour

1. Introduction

It is proving extremely difficult to define clearly the term "Children with Special Educational Needs" mainly because of the absence of a universally accepted definition that systematically approximates the evolutionary nature of those defined as special educational needs. The educational system's objectives, as well as the social standards and broader values of the community, are the ones that define them (Papanis et al., 2009). Each society by season expresses a different perception and consequently carries a different vision of persons with special educational needs (SEN) and the structure of their education. An extensive literature review indicates that there have been many attempts to create a definition for these children that are universally acceptable. Although the initial efforts focused on characterizations such as "abnormal children", "inappropriate", "problematic", "ill" etc., by emphasizing their disadvantages and disability, they demonstrate the state's position towards these people. In 1981 the term "children with special learning disabilities" was established in England for the first time, referring mainly to children with learning difficulties in reading, writing, spelling and spoken word, but which have brought normal mental development and cognitive abilities of typically developing children.

Similarly in Greece during the last three decades with two laws of 1985 and 2000 are making attempts to clarify this term. Initially, by Law 1566/1985 the definition of "handicapped" was assigned to certain groups of children in need of special education and vocational training. However, the definition focused on the distinction between these individuals and others. Thus, Law 2817/2000 follows by renaming these children to "persons with special educational needs" and now emphasizes their educational needs. Currently, the term "people with special needs" is starting to decline because it does not adequately describe the disability. By pretending to be milder and less offensive, it hides the social environment's difficulty in accepting the disabled. Also, negative social stereotypes and prejudices are perpetuated by it.

2. Literature review

There is a clear difference in educational care around the development of social skills in Greece in relation to other countries. The educational framework for social skills in Greece was recently established, as there were no specific curricula for all levels of education until 1996 (Tzouriadou et al., 2016). From 1996 onwards the first special education curriculum was initially formulated, which was originally intended for primary education, and could also be used in pre-school education for the development of social skills and adaptation skills.

A thorough study of the current curricula for students with mild educational needs reveals that social skills as a key concern and an important part of education are only Interdisciplinary Single Curriculum Framework - Curricula with moderate to mild intellectual disability (Ministry of Education, 2004). Social skills considered as a separate subject are promoted within an open and flexible curriculum and are divided into the following sections (Ministry of Education, 2004):

- Interpersonal relationships
- Communication
- Responsibility

- Self-perception/self-esteem

As pointed out in the Interdisciplinary Single Curriculum Framework - Curricula for students with moderate and mild intellectual disabilities, the results of an early education in social skills prove to be beneficial throughout the child's later life. This training can take place either in a group or individual setting, and may follow student-activated educational approaches or interdisciplinary and collaborative approaches respectively. Communication between teachers, parents, and other members of the educational community can guarantee the success of the educational venture (Ministry of Education, 2004).

This Curriculum includes in addition to the above-mentioned general modules, teaching objectives and indicative activities. There are also suggestions for the use of supervisory material such as computers, books, puzzles, pictures, toys, various other objects, plasticine etc. It is clarified that the proposed activities and teaching materials do not bind the teacher at all. Instead of, by evaluating factors related to the teaching and the student's weaknesses and abilities, the teacher can choose the most appropriate one. In addition, it can adjust the objectives on a case-by-case basis and set the evaluation criteria itself in order to evaluate their achievement (Ministry of Education, 2004).

The curriculum connects social skills with pre-occupational skills in an inextricable way. Assuming that acquiring social skills, such as interpersonal skills, is necessary for a student's healthy development into a successful adult worker.The philosophy of pre-vocational education does not differ significantly from that of the social skills (Ministry of Education, 2004).

Various researches have been conducted in Greece on the social skills of people with mild educational needs. Initially, Agaliotis & Goudiras (2004) research, focusing on how children with learning disabilities resolve their interpersonal conflicts, demonstrated the difficulty of these children to interpret the stimuli they receive from interpersonal conflict situations and to find alternative conflict resolution always compared to their typically developing classmates. In addition, they have difficulty in assessing the consequences of any possible alternative.

This study records similarities and differences between children with and without learning disabilities in their strategies for resolving an interpersonal conflict without, of course, detecting significant differences between the two groups of children. According to the results of the study, children with learning disabilities do not always adopt a specific pattern of behaviour when solving a social problem, but show a tendency to differentiate according to the circumstances. Survey data were collected through interviews with the sample and focused on three interpersonal conflict issues (Agaliotis & Goudiras, 2004).

3. Methodology

3.1 Participants

The sample consisted of N = 350 teachers, 48% men and 52% women, who worked in special education (47%) or in general education (88%). The sample was recruited using a convenience/opportunity sampling method, where the teachers selected were available and suitable for participation in the research, given the time and financial resources constraints.

3.2 Procedures

The Google Forms platform was used to electronically distribute the questionnaire to potential participants. As a result of using an opportunity sampling method, the researcher sent the questionnaire to school email addresses and colleagues through her academic, work, and personal contacts. The teachers who agreed to participate in the survey completed the questionnaire and returned it electronically to the researcher. The participants were informed that their participation was voluntary and anonymous, and they had the option to withdraw from the study at any time without having to explain anything.

3.3 Measures

The present study used adapted versions of the "Teacher Observation of Classroom Adaptation-Checklist" (TOCA-C) questionnaire by Leaf et al. (2002) and Koth et al. (2009), translated and standardized in Greek by Kourkounasiou & Skordilis (2014). In addition, the questionnaire includes a section that collects participants' demographic and employment information. The demographic and employment information included gender, age, years of service, educational level, teacher specialty (special or general education), place of work (primary/secondary education), number of children in the classroom, diagnosis of children with mild educational needs in the classroom, and diagnosis category of class students.

The TOCA-C scale (Leaf et al., 2002; Koth et al., 2009; Kourkounasiou & Skordilis, 2014) includes 21 items, which are graded on a five-point Likert scale ("not at all" to "too much"). Three dimensions are extracted in the original questionnaire: Concentration problems (items 1, 3, 7, 11, 13, 19, 21), Disturbing behaviours (items 4, 6, 8, 10, 12, 15, 16, 18, 20), and Prosocial behaviours (items 2, 5, 9, 14, 17). A high score on concentration problems (7 items) and disturbing behaviours (9 items) indicates the existence of negative behaviours, while a high score on prosocial behaviours (5 items) indicates the existence of positive behaviours. The TOCA-C scale has been found to have high validity and reliability (Koth et al., 2009; Kourkounasiou & Skordilis, 2014; Schaeffer et al., 2006).

4. Results

4.1 Descriptive statistics

The sample consisted of N = 350 participating teachers, 48% men and 52% women. Teachers' ages varied, with most

being over 33 years old (81%). Almost all teachers were university graduates (95%), 53% had undertaken training, 48% had a master's degree and 8% had a PhD/doctoral degree. Their years of service varied, with 29% having up to 10 years of experience and 39% having 11 to 20 years of experience. Most participants were general education teachers (88%) while almost one in two were special education teachers (47%), in particular, 12% worked only in special education and 53% were employed only in general education. Of those employed in primary education (total N = 213), 54.5% did so in general class, 22% in parallel support, 15% in integration classes and 8.5% in special schools. Of those who worked in secondary education (total N = 161), 61% did so in general class, 15.5% in special Gymnasiums, 10% in integration classes and 6% in special vocational education and training laboratories (Greek E.E.E.E.K.). Only 4% of the sample of teachers worked in educational and counselling support centres (KESY) (Table 1).

Table 1: Demographic characteristics of teachers

		Frequency	Percent
Gender	Males	168	48.0
	Females	182	52.0
Age	18-25	13	3.7
	26-33	53	15.1
	34-41	113	32.3
	42-49	90	25.7
	50 and over	81	23.1
Educational level	University	334	95.4
	Training/Seminars	185	52.9
	Master's degree	169	48.3
	PhD/Doctorate degree	27	7.7
Years of service	1-10	100	28.6
	11-20	137	39.1
	21-30	69	19.7
	31 and over	44	12.6
Teacher specialty	General education teacher	309	88.3
	Special education teacher	163	46.6
Workplace: Primary education (N = 213)	Special school	18	8.5
	Integration class	32	15.0
	Parallel support	47	22.1
	General class	116	54.5
Workplace: Secondary education (N = 161)	EEEEK	10	6.2
	TEE of special education	5	3.1
	Special Gymnasium	25	15.5
	Special High school	6	3.7
	General class	98	60.9
	Integration class	16	9.9
	Parallel support	1	.6
Workplace: KESY (N = 344)	Yes	15	4.4

Six percent of teachers had up to 5 students in the classroom (6%), 23% had 6 to 10 students, 19% had 11 to 15 students, 30% had 16 to 20 students and 21% had more than 20 students in the classroom. The number of children with mild special educational needs in the classroom was 1 to 2 in 30% of cases, 3 to 4 children in 34% of cases, 5 to 6 children in 26% of cases, 7 to 8 children in 6% of cases and more than 8 children in 3% of cases. Most teachers reported that they had children with diagnoses of mild special educational needs in the classroom (68%). Most teachers reported that they had children diagnosed with special learning difficulties in their class (72%), 43% reported that they had children with attention deficit-hyperactivity disorder (ADHD) and 27% replied that they had children with speech and communication disorders in class. In addition, 23% of teachers had children with mild mental disability in their class, 21% had children with emotional disorders and behavioural problems, 16% had children with autism spectrum disorder (ASD), and only one teacher reported that there were no children with formal diagnoses of mild special educational needs in the classroom (Table 2).

Table 2: Children with mild special educational needs in the class

		Frequency	Percent
Number of children in class	1-5	21	6.0
	6-10	82	23.4
	11-15	68	19.4
	16-20	106	30.3
	21 and over	73	20.9
Number of children with mild special educational needs in class	1-2	105	30.0
	3-4	119	34.0
	5-6	92	26.3
	7-8	22	6.3
	9 and over	12	3.4
Diagnosis of mild special educational needs in class	Yes	238	68.0
	No	112	32.0
Diagnosis categories of children with mild special educational needs in class*	Special learning difficulties	251	71.7
	Attention deficit-hyperactivity (ADHD)	149	42.6
	Speech and communication disorders	94	26.6
	Mild mental disability	80	22.9
	Emotional disorders/behavioural problems	75	21.4
	Autism spectrum	56	16.0
	None	1	.3

**Teachers could provide more than one answers*

Descriptive statistic of TOCA-C

The Table 3shows the maximum and minimum values, mean, standard deviation, skewness and kurtosis in a sample of 350 teachers.

Table 3: Descriptive Data of TOCA-C scale

	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Concentrates	2,0	5,0	3,634	,5893	-,196	,130	-,219	,260
Is friendly	2,0	5,0	4,329	,6626	-,539	,130	-,436	,260
Pays attention	2,0	5,0	3,446	,6067	-,139	,130	-,396	,260
Breaks rules	1,0	4,0	2,623	,6604	,350	,130	-,485	,260
Is liked by classmates	2,0	5,0	4,097	,6258	-,284	,130	,349	,260
Doesn't get along with others	1,0	4,0	2,094	,5560	,238	,130	,752	,260
Works hard	2,0	5,0	3,557	,5724	-,594	,130	-,353	,260
Harms others	1,0	4,0	2,703	,6961	,221	,130	-,561	,260
Shows empathy & compassion	2,0	5,0	3,666	,6376	-,574	,130	,368	,260
Gets angry when provoked by other children	2,0	5,0	3,380	,7387	-,310	,130	-,534	,260
Stays on task	2,0	5,0	3,511	,5752	,228	,130	-,599	,260
Yells at others	1,0	4,0	2,326	,6487	,448	,130	,255	,260
Is easily distracted	2,0	4,0	3,123	,5451	,073	,130	,192	,260
Is rejected by classmates	1,0	4,0	1,971	,6593	,332	,130	,291	,260
Fights	1,0	4,0	2,660	,6568	,186	,130	-,413	,260
Lies	1,0	4,0	2,257	,7278	,190	,130	-,169	,260
Has many friends	2,0	5,0	3,977	,6099	-,293	,130	,671	,260
Harms property	1,0	4,0	1,923	,6705	,148	,130	-,572	,260
Completes assignments	2,0	5,0	3,743	,6443	-,348	,130	,287	,260
Teases classmates	2,0	4,0	3,034	,6634	-,038	,130	-,717	,260
Learns up to ability	2,0	5,0	3,649	,5608	-,851	,130	,307	,260

4.2 Reliability

Cronbach's alpha was calculated for all the variables of the TOCA-C scale (Table 4). A Cronbach's alpha of .7 to .8 indicates a scale has "good" reliability (Cronbach & Meehl, 1955). For all academic scales that was used the internal reliability is satisfied.

Table 4: Cronbach's alpha of TOCA-C

Subscales	Cronbach's a (N=350)	N (Items)
Concentration problems	,646	7
Disruptive behaviour	,819	9
Prosocial behaviour	,721	4

4.3 Principal component analysis for TOCA-C

A PCA followed by varimax rotation revealed 5 orthogonal factors which explain 57.8% of the total variance. The first three components expressed the theoretical factors of the scale, confirming its construct validity. Further, an additional division of the second factor "Disruptive Behaviour" was observed into two subscales, while a fifth factor was reported consisting of 4 items from which 2 were from the Concentration Problem and 2 were from the "Disruptive Behaviour" theoretical factors (Table 5).

Table 5: Rotated component matrix

		Theoretical Factors Component				
		CP	DB	PB	DB	CP
		1	2	3	4	5
1	Concentrates	0,503				0,585
3	Pays attention	0,418				0,685
7	Works hard	0,561				
11	Stays on task	0,701				
13	Is easily distracted	-0,532				
19	Completes assignments	0,712				
21	Learns up to ability	0,636				
4	Breaks rules					-0,602
6	Doesn't get along with others				0,732	
8	Harms others					-0,411
10	Gets angry when provoked by other children	-0,420			0,438	
12	Yells at others				0,662	
15	Fights		0,666			
16	Lies		0,810			
18	Harms property		0,669			
20	Teases classmates		0,645			
2	Is friendly			0,648		
5	Is liked by classmates			0,719		
9	Shows empathy and compassion for others'			0,666		
14	Is rejected by classmates				0,602	
17	Has many friends			0,730		

Note. CP = concentration problems; DB = disruptive behaviour, PB = prosocial behaviour

5. Conclusion

It was concluded that the teachers in both special and general education viewed students with mild special educational needs as often being friendly and having a lot of friends. As well, seek the company of others and to help and support others, to be liked by their peers, to be able to express their opinions without hesitation, to listen to the teacher's instructions, to concentrate and pay attention to the tasks at hand, to complete their work, to understand other students' feelings, to exert effort, and to learn as much as they could.

The teachers reported that students with mild special educational needs sometimes paid attention to the lesson. Furthermore, they displayed their emotions to others, teased or annoyed other students, and became irritated when teased by others. Students with mild special educational needs were often distracted, seeking to understand the causes of their problems, and reacting strongly when they were criticized. Also, their needs have a tendency to quarrel, frighten, fail to follow school rules, and give up trying easily. However, according to the teachers, children with mild special educational needs rarely shouted or lied. Their relationships with others are typically good, they are rarely rejected by classmates, and they rarely abuse or damage belongings they don't own.

The importance of this intervention can be seen in improving concentration, prosocial behaviour, internalizing problems, and improving parent-teacher relationships. The overall focus on emotional regulation is aided by the underlying factors that demonstrate a significant influence, such as concentration problems. Identifying positive concentration behaviours is more difficult than identifying emotional regulation in a preschool setting.

The results indicate that the TOCA-C is a reliable, efficient, and effective tool for use in primary school settings. This tool has the potential to be useful for various purposes. The use of TOCA-C as a screening tool for identifying students with special needs who need services is something of interest. In addition, studies on social skills can benefit from examining its predictive validity, sensitivity, or specificity (Koth et al., 2009). The current findings and previous research on specific subscales of the TOCA (such as concentration problems, disruptive behaviour, and prosocial behaviour) indicate the potential of this measure as a screening tool (refer to Petras et al., 2004; Racz et al., 2013).

Social workers and other clinicians may benefit from the current findings using the TOCA-C to identify pupils with SEN who require services. Moreover, assess or monitor progress over multiple administrations of the TOCA-C. The impact of programs and services can be monitored longitudinally by using various versions of the TOCA, demonstrating its potential as a progress monitoring tool (Koth et al., 2009). The TOCA-C is commonly used to evaluate the impact or need for behavioural and social-emotional preventive programs, mental health programs, or other tiered interventions. These results also indicate that researchers should adjust to the demographic characteristics of students. It is essential to consider gender, age, and grade level when analysing the effects of intervention programs or the onset and development of behaviour problems.

Academic support is crucial to meet the needs of these students, as non-respondents are at increased risk of suspension, academic failure, and inappropriate referral to special education (Bradshaw et al., 2008; Mayer, 1995). Training, professional development, coaching, and program materials are necessary for more intensive selective and indicated prevention programs and services. Preventive research is vital in this field. Numerous prevention trials

have led to a strong reliance on assessments of student behaviour and mental health issues (Ialongo et al., 1999; Musci et al., 2022).

Lastly, if teachers consider the behaviour of pupils to be stable, they may also consider it to be immutable, which can be an obstacle to the adoption and implementation of prevention programmes. Changing teachers' perceptions of their school context, burnout, and effectiveness can lead to changes in their perceptions and actions in response to student behaviour. The consequences of this are both for student success and the prevention of negative outcomes. Prevention researchers should consider other factors when relying solely on teacher ratings of student behaviour as outcomes (Pas & Bradshaw, 2014). The current data can be used by researchers to identify potential factors that will influence the evolution of teacher perceptions in the future and assess the correlation between this process and the increase in teacher ratings of students.

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