

ASD-EAST: Identifying training needs of specialized teachers

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Keywords: Education, Inclusion, Training, Autism, Teachers.

RATIONALE

Autism spectrum disorder (autism) affects about 1 in every 100, and impacts all aspects of the individual's experience, including how they learn. Children and young people with autism share common education needs with all other children, and are entitled to a high quality education. However, they have specific, regarding resulting from the characteristic difficulties in autism regarding communication, social understanding, inflexibility and sensory processing. Education has been identified as the key area of intervention for those with autism, and meaningful access to effective education is crucial. Teachers need a range of skills and strategies to meet the needs of these learners, and providing effective education has been identified as challenging throughout Europe, and in Central & Eastern Europe and the Balkans in particular. Based on these needs, the partnership of the ASD-EAST project focuses on developing appropriate training to support effective teaching, to ensure the inclusion of learners with autism in Croatia, North Macedonia and Poland.

There is a lack of research data on the training needs of teachers in the countries of Eastern Europe, therefore conducting a mapping study was essential before fulfilling further objectives of the project.

OBJECTIVES

- Undertake initial mapping activity to identify
 - country-specific and Europe-wide good practice
 - areas needing development with regard to the effective educational inclusion of children with ASD in Croatia, North Macedonia and Poland
- Develop locally appropriate training and materials for specialist educators to support the educational inclusion of primary-age children with ASD (in both special education and mainstream/inclusive settings)
- Use these materials to:
 - pilot the training with specialist educators from both special and mainstream settings across Croatia, North Macedonia and Poland
 - evaluate the impact of this training on teachers' skills and practice
- Share the materials with stakeholders and professionals

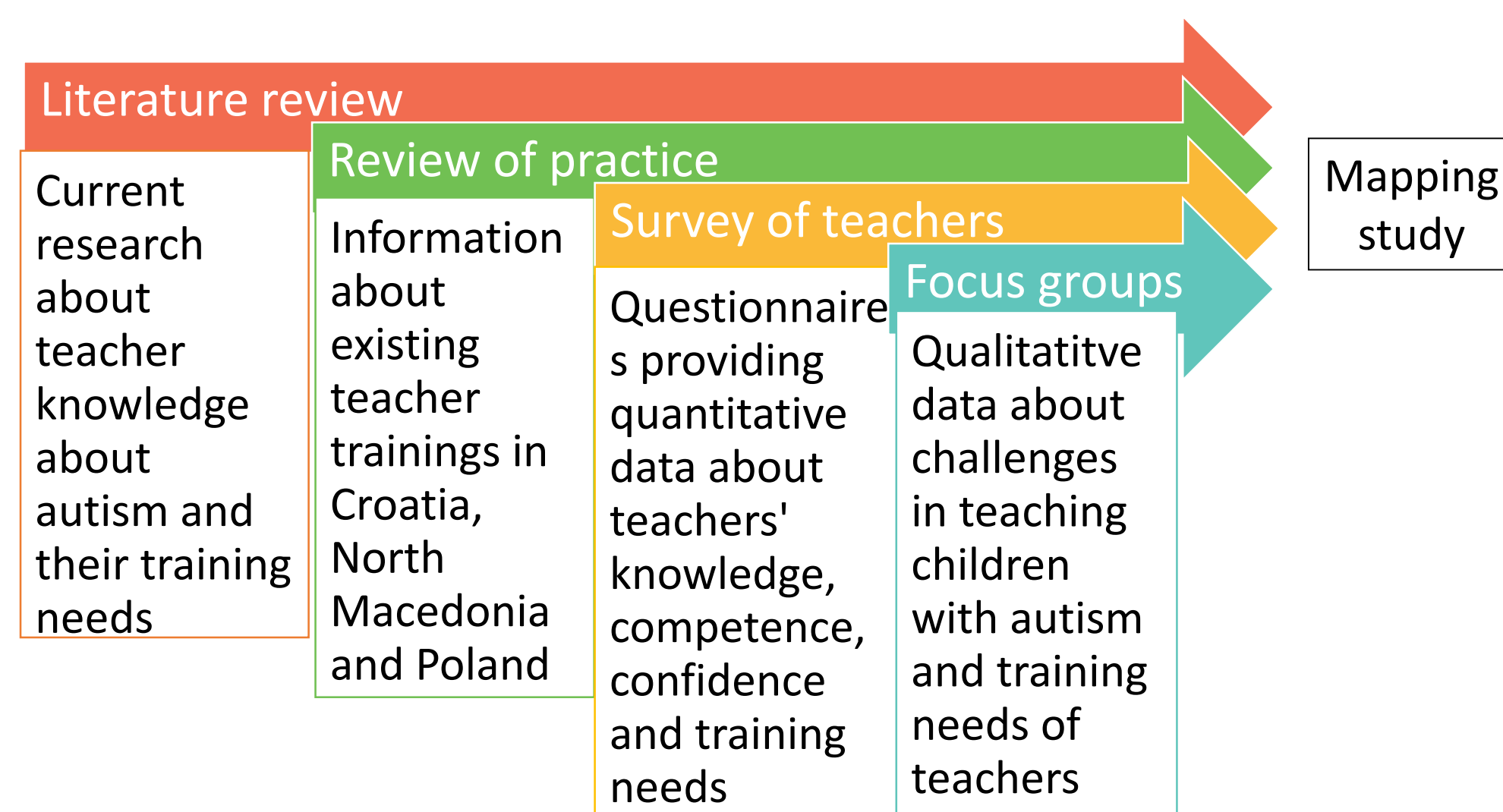
METHODOLOGY

The mapping study was undertaken by the academic partners within the ASD-EAST project (the University of Zagreb, the Pedagogical University of Krakow, Autism Macedonia Blue Firefly and the University of Northampton during autumn/winter of 2018-19.

The study was undertaken gathering both quantitative survey data and qualitative focus group data, gathered from both mainstream and special education teachers.

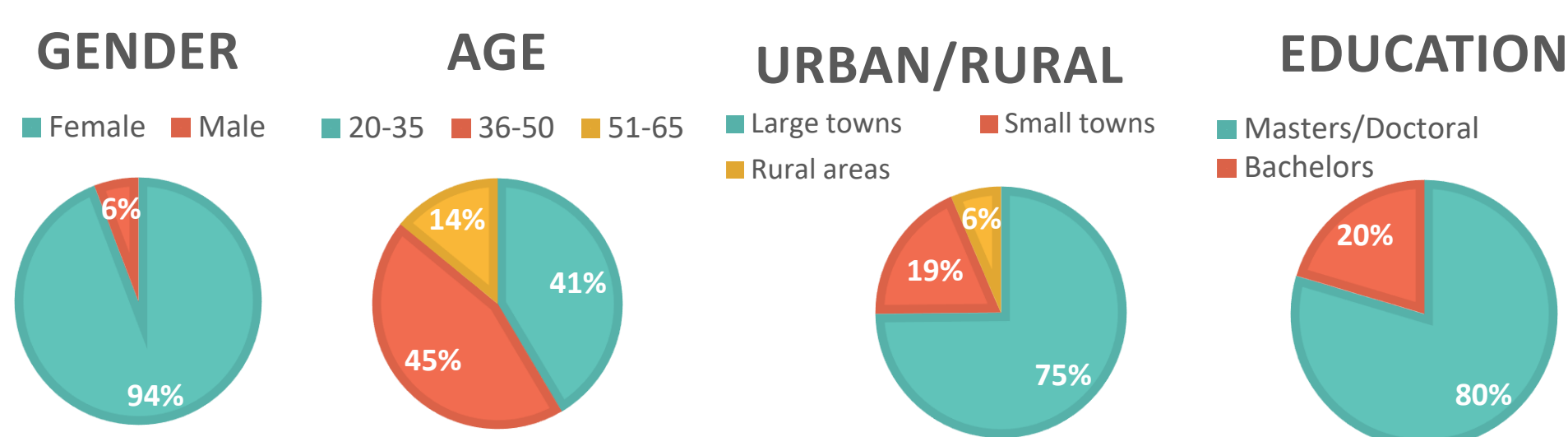
The survey tool collected quantitative data regarding:

- teachers' knowledge and understanding of ASD
- their attitudes towards different types of educational approaches in ASD (and the extent to which they are used)
- their confidence in addressing the educational needs of such children
- their evaluation of their own training needs.



SURVEY SAMPLE

A total of 294 specialist teachers (118 from Poland, 73 from North Macedonia, 103 from Croatia) responded in the survey, 47% worked in mainstream schools and 53% were staff of special schools.



FINDINGS

Previous autism specific training of teachers

Analysis of the dataset revealed that there were differences in both initial and further training about ASD, both between countries and between mainstream and special school teachers. Respondents were asked about previous training they had received regarding autism, both during their university education and beyond. A third (n = 98; 33%) stated that they had received no training – the majority of these were from Poland, where most respondents were from mainstream settings. Croatian respondents, most of whom worked in special education settings, reported the greatest level of training.

Initial training received

Analysis identified significant differences (x2 = 31.463; p = 0.000) between mainstream and specialist teachers with regard training about ASD during their university studies, with Croatian respondents reporting the highest levels of training. Cross-tabulation identified that specialist teachers from mainstream system had the highest response rate to the category "no training during university studies". In each of the four other categories, specialist teachers from within the special system also identified a higher level of training. Significant differences were revealed between the three countries regarding the levels of training about ASD provided during respondents' university studies (x2 = 173.989; p = 0.000), with Croatian respondents reporting the highest levels of training.

Further training

With regard to further training, just under half (n = 130; 44%) had received no further training since then other than their own reading. Training opportunities seemed most frequently accessed in Croatia, with Macedonian teachers having least access to training.

Analysis identified significant differences regarding further training in ASD between those working within special education and those in mainstream schools (x2 = 52.467; p = 0.000). Specialist teachers from within mainstream system reported significantly fewer further training opportunities than those within special education.

Content of training received

CONTENT OF TRAINING	Theory about autism	Teaching and intervention methods	Practical experience
Yes	205 (69.7%)	169 (57.5%)	125 (42.5%)
No	88 (29.9%)	123 (41.8%)	167 (56.8%)
Total	293 (99.7%)	292 (99.3%)	292 (99.3%)

Attitudes of specialist teachers

Responses to a series of Likert scale statements demonstrated a broad range of experience and understanding regarding characteristics and needs of children with autism across and within the three countries.

- 'Children with ASD benefit from early medical/pharmacological intervention'. Macedonian teachers were far more positive towards early interventions of these types than their Polish and Croatian counterparts (x2 = 62.704; p = 0.000).
- 'ASD can be cured'. Over 20% of Macedonian teachers thought ASD could be cured, as compared with fewer than 7% of Polish teachers, or 15% of Croatian teachers (x2 = 20.083; p = 0.000).
- 'Children with ASD are incapable of being educated alongside their mainstream peers'. Almost three-quarters of Croatian teachers (n = 75; 73%) and over half of the Macedonian teachers (n = 39; 53%) agreed with this statement; by contrast, only a quarter of Polish teachers (n = 29; 25%) held this view (x2 = 53.831; p = 0.000).
- 'Children can grow out of ASD'. Macedonian teachers appear to have the most belief in the possibilities of this occurring, with 45% holding this belief, compared to 25% of Polish teachers and 15% of Croatians (x2 = 30.993, p = 0.000).

Knowledge about methods used in autism

Respondents were asked about their levels of knowledge regarding a number of approaches that may typically be used with children with ASD. In particular they were asked to identify whether they:

- had previously received training in any of these methods
- whether they felt competent in using these methods.

Analysis identified a very low level of previous training – or perceived competence – in any methods across the sample.

- 15% of all participants (and 24% of the Croatian participants) had received training in augmentative and alternative communication (AAC) methods, such as signing or PECS. However only 8% of the whole sample (11% of Croatian teachers) felt competent in using the approaches.
- Polish teachers reported receiving training in speech therapy (20%), child-oriented approaches (25%) and expressive art approaches (16%). However, much lower numbers expressed feeling competent.
- There was low overall training in typically-used approaches such as structured teaching (TEACCH) – 11% had received training, 7% felt competent in its use; Social Stories – 11% had received training, 5% felt competent in its use; or Applied Behaviour Analysis – 8% had received training, 5% felt competent in its use.
- There were even lower levels of awareness and competence with regard to group approaches such as social skills groups – 8% had received training, 4% felt competent; or peer-mediated learning – where only 3% had received training or felt competent.
- Mainstream teachers reported lower levels of training, awareness and competence than special school teachers.

Use of different methods

Despite the low levels of training and perceived competence, methods such as sensory approaches, TEACCH, ABA, AAC were nonetheless in use frequently or daily in all of the three countries.

- Teachers in Macedonia report using structured teaching, Social Stories and expressive approaches in more than 50% of settings.
- Teachers in Croatia report using Social Stories, AAC, expressive and peer-mediated approaches in more than 50% of settings.
- There was a higher use of established approaches in ASD in special schools than in mainstream schools.
- In many mainstream schools, ASD-specific approaches were never used.

This suggests that many teachers are using specific approaches either without training or without feeling competent in their use.

Perceived training needs of specialist teachers

There was high agreement (almost 90%) that teachers would benefit from training. Training with regard to theoretical information was identified as least important, but was still seen as relevant by more than half of teachers. Practical strategies, particularly those relevant to supervisors' own settings were identified as of high importance, as was supervision and the acquisition of tools and resources. Teachers expressed a strong desire to undertake self-experiential learning.

Teachers who feel they would benefit from training:

BENEFIT FROM TRAINING	ALL		NORTH MACEDONIA		POLAND		CROATIA	
	N	%	N	%	N	%	N	%
Yes	261	88,8	69	94,5	98	83,1	94	91,3
No	5	1,7	2	2,7	2	1,7	1	1,0
I don't know	26	8,8	2	2,7	18	15,3	6	5,8

Teachers reflected their need of further training in specific intervention areas, mainly in addressing challenging behaviour, communication and social skills, and sensory needs of children with ASD. Mainstream teachers would like to learn how to use strategies in the classroom, adapt and individualise their teaching. Teachers in special settings were interested in methods focusing on specific areas of need of their students. Participants in all focus groups identified their need to improve communication and collaboration with parents and other professionals.

CONCLUSIONS

Summary of key findings from the initial mapping exercise focused on the training needs of specialist teachers in Croatia, North Macedonia and Poland revealed some challenges that teachers face in their practice as well as areas with potential for positive change towards educational inclusion of students with ASD in mainstream and special schools.

The curriculum and training materials that are developed in the ASD-EAST project aim to address the challenges and identified needs through raising knowledge, understanding and practical skills of specialist teachers. To respond to the needs of teachers adequately, the curriculum contains parts that are specific for mainstream or special settings, allowing for modified application depending on the local context of each country.