



## **AUTISM EDUCATION NEED ANALYSIS REPORT FOR GREECE, ROMANIA, AND BELGIUM**

### **1. Participants**

In order to find out what are the needs for autism education in professionals working with people diagnosed with autism, we asked specialists from 3 different countries (i.e. Greece, Romania, Belgium) to answer a questionnaire regarding their training needs in autism-related challenges. We got answers from 701 people from all the 3 countries, as follows: in Romania 475 people (470 females and 5 males), in Greece 211 respondents (180 females, 31males), in Belgium, 15 respondents (14 females, one male).

Regarding the age of the participants, in Romania 7% of them were 20-25 years old, 25% were 26-35 years old and the remaining majority was older than 35 years. Ten percent of the participants in Greece were 20 to 25 years old, 38% were 25-35 years old and 52% were above 35 years old. The participants in Belgium have 25-35 years old (23%) and above 35 years (73%).

### **2. Instruments**

We created a need analysis questionnaire containing closed, categorical and open questions, with 3 main sections. In the first section, we collected demographical information (gender, age, profession, education, years of experience in the field etc.). The middle section of the questionnaire contains 14 questions with answers on a 4-point Likert scale, from 1 (“I don’t know” or “Not helpful”) to 4 (“I know a lot” or “Very helpful”). Example of an item is “How helpful it would be for you to attend a course on improving communication skills in people with autism?”. In the final section of the questionnaire, the participants were asked to describe a situation in which they did not know how to manage a child with ASD and offer examples of things they would like to learn from this programme.



### 3. Procedure

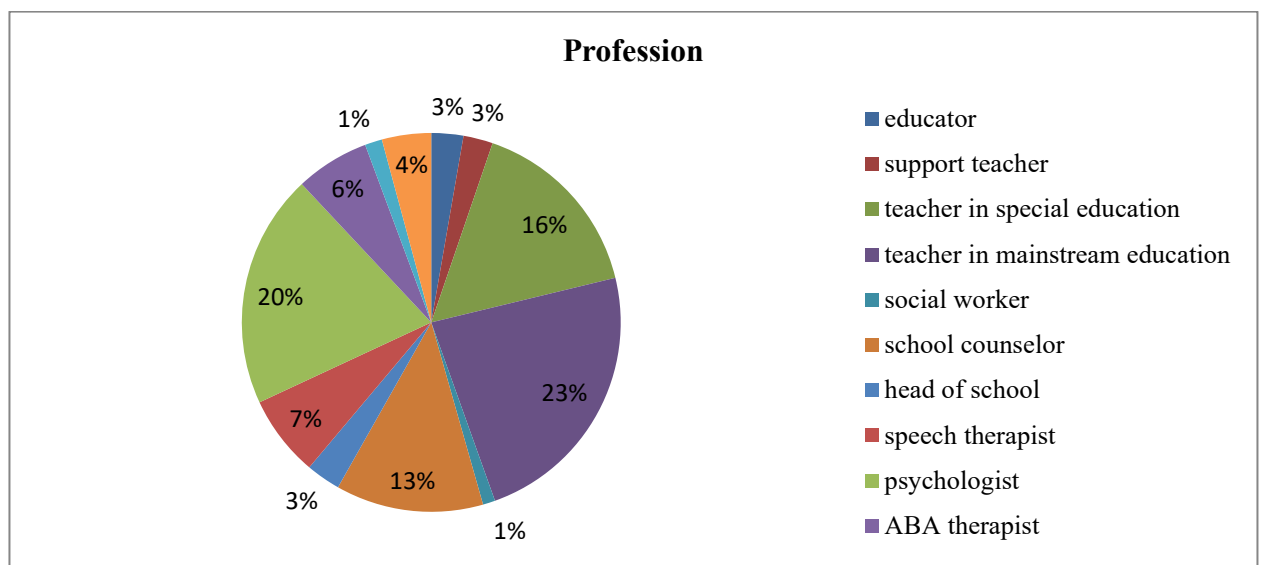
We wrote the questionnaire with Google Forms and shared it with the network of professionals in the child education and intervention area. Before completing, the participants read an informed consent in which we explained the purpose of the questionnaire, the risks, and benefits of providing the information. Also, they could withdraw from the survey at any time they see fit.

### 4. Results

#### 4.1. Demographic and socio-professional information

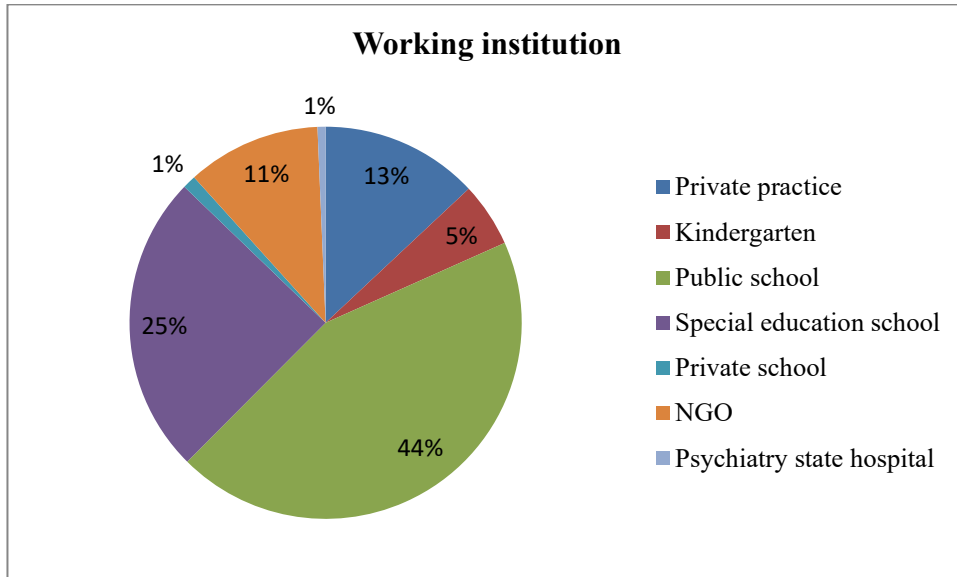
##### *Romania*

In the first part of the survey, regarding profession, we found out that 23% of Romanian respondents are teachers in the mainstream education system, 20% are psychologists, 16% are teachers in the special education system, 13% are school counsellors, 7% are support-teachers for students with ASD and 6% are ABA therapists. The remaining 15% work as occupational therapists, speech therapists, educators, social workers and head of school. Please see the graphic below.

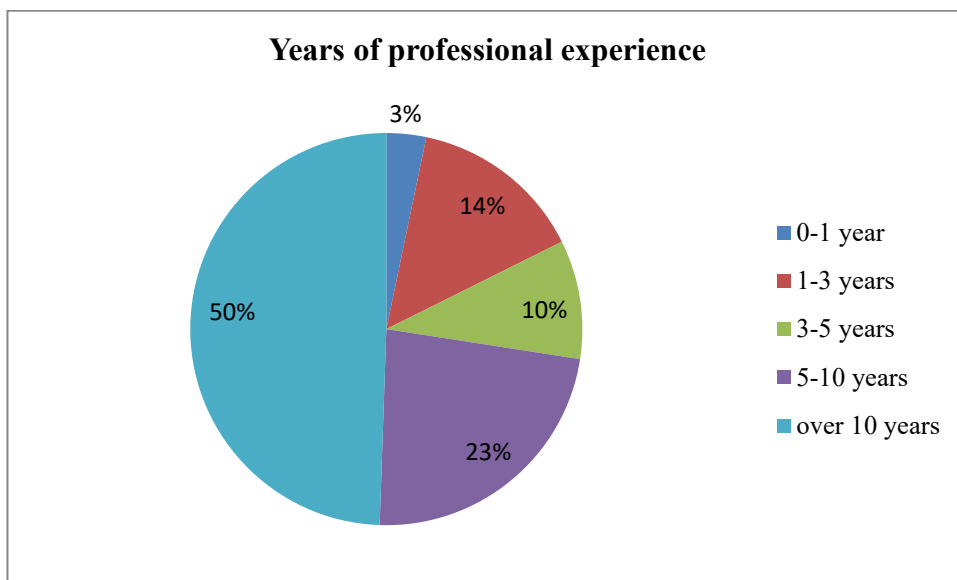




Forty-four per cent of our respondents work in public schools, 25% in special education schools, 13% in private practice facilities, 11% in intervention centres managed by NGOs. The remaining 7% work in kindergarten, private school, and psychiatric public hospitals.

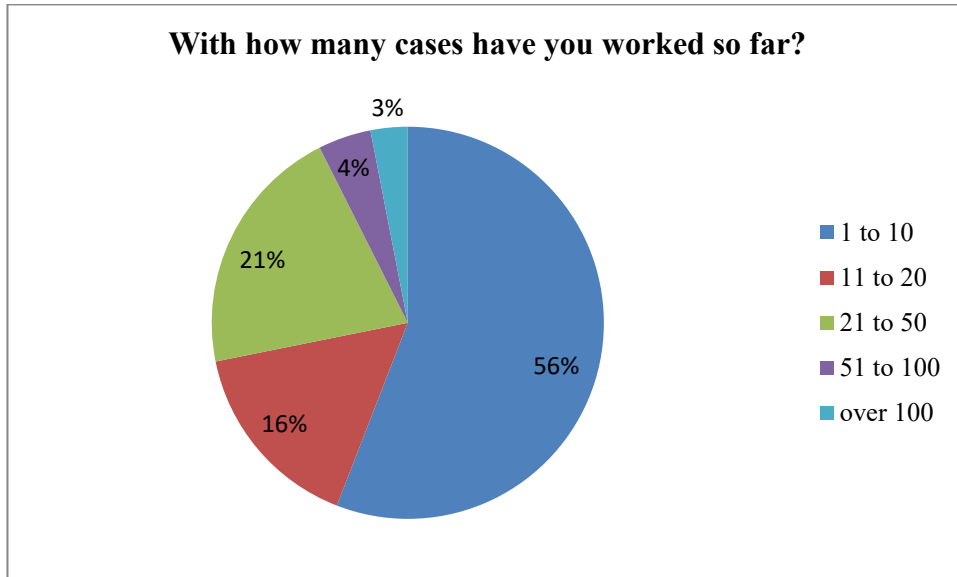


Fifty per cent report having more than 10 years experience in their professional area, 23% have worked for 5-10 years, 14 % have worked for 1-3 years and 10% have worked for 3-5 years. For other details, please see the graphic below.

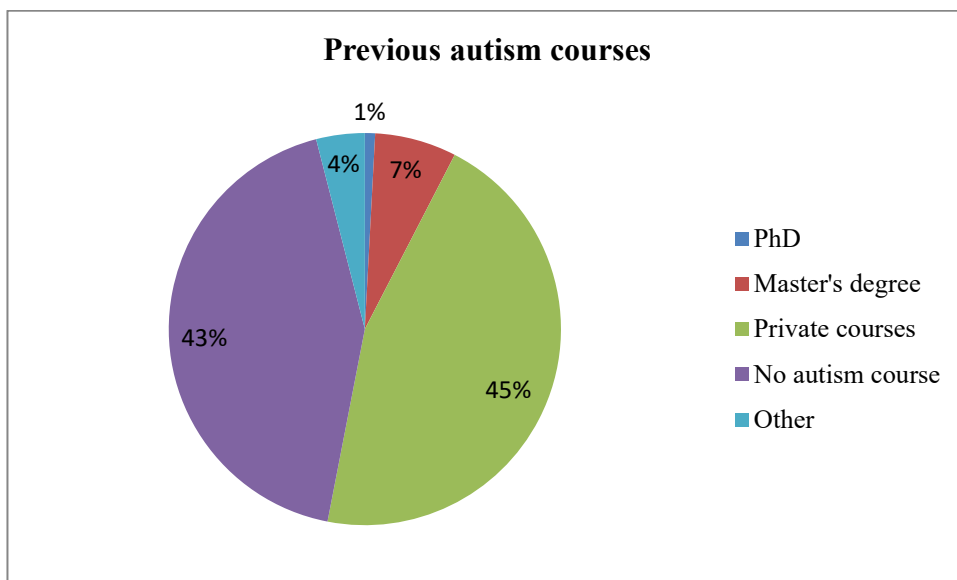




The majority (56%) of Romanian respondents say that they worked with 1-10 cases, 16% worked with 11-20 cases, 21% worked with 21-50 cases, 4% worked with 51-100 cases and the remaining 3% worked with over 100 autistic people.



With respect to the previous autism courses already attended by Romanian respondents, we found out that 43% did not take any course, 45% attended private courses. Only 7% took master's classes in autism and 4% attended PhD level courses about autism.



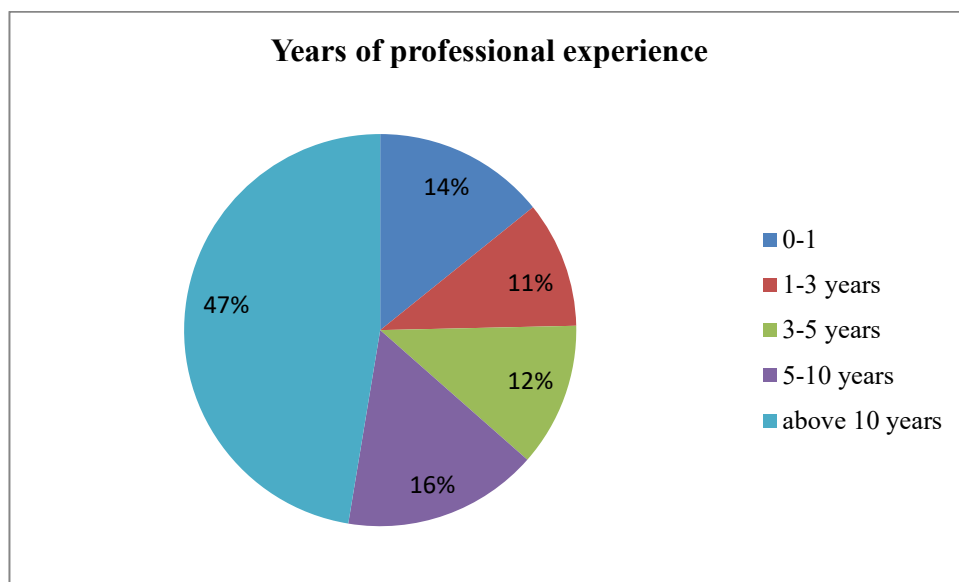


## Greece

Regarding the profession/occupation of Greek respondents, we found out that 22% are teachers in the mainstream education system, 8% are psychologists, 19% are teachers in the special education system, 3% are school counsellors, 11% are supporting teachers for students with ASD and 1% are ABA therapists. Other respondents work as 5% occupational therapists, 16% speech therapists, 10% educators, 1% students, 0,5% parent, 0,5% medical staff and 3% head of school.

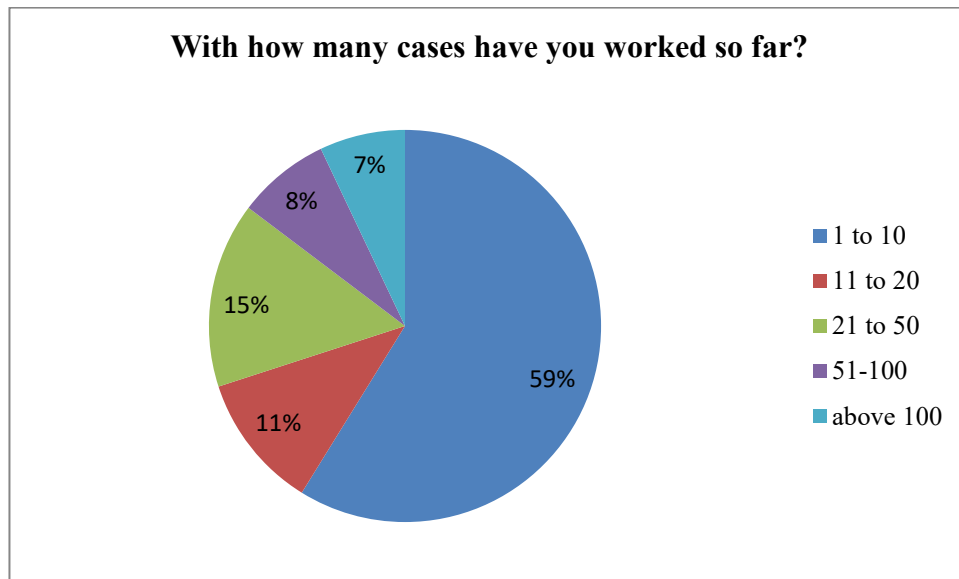
The places where participants work is diverse: 34 per cent of participants work in public schools, 4% in special education schools, 47% in private practice facilities, 4% in intervention centres managed by NGOs. The remaining 11% work in kindergarten, private school, and psychiatric public hospitals.

Years of experience: 47% report having more than 10 years experience in their professional area, 16% have worked for 5-10 years, 11% have worked for 1-3 years and 12% have worked for 3-5 years. Only 14% of the respondents have less than one years of activity with an autistic person. For other details, please see the graphic below.

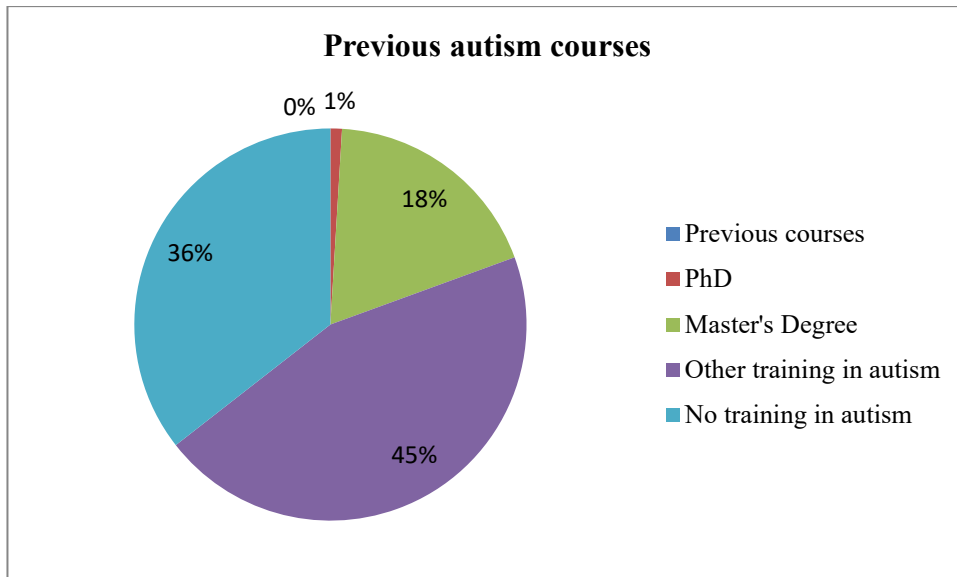




With respect to the number of autistic cases they managed, the situation looks like this: the majority (59%) of Greek respondents say that they worked with 1-10 cases, 11% worked with 11-20 cases, 15% worked with 21-50 cases, 8% worked with 51-100 cases and the remaining 7% worked with over 100 autistic people.

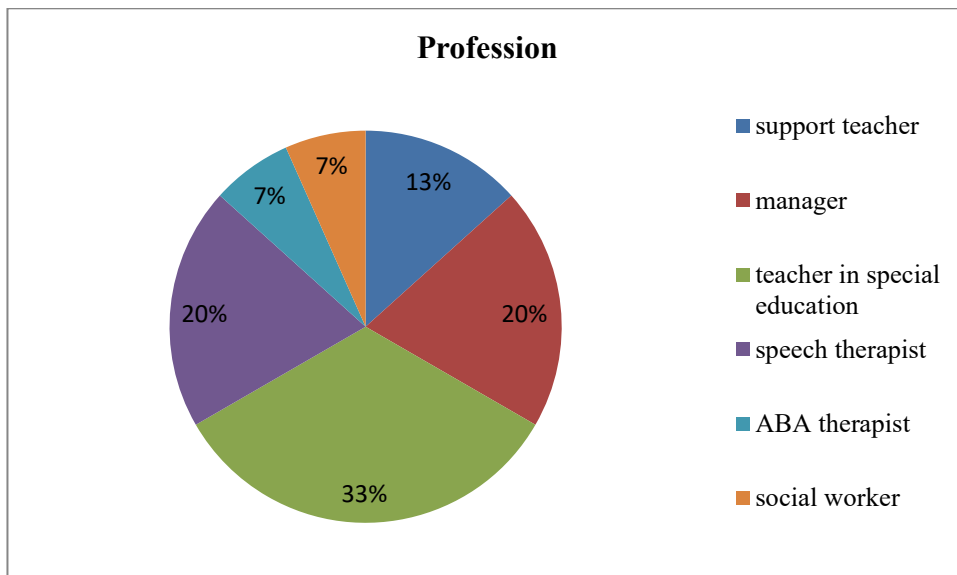


With respect to the previous autism courses already attended by Greek participants, we found out that 36% did not take any course, 45% attended other courses in autism. Only 18% took master's classes in autism and 1% attended PhD level courses about autism.

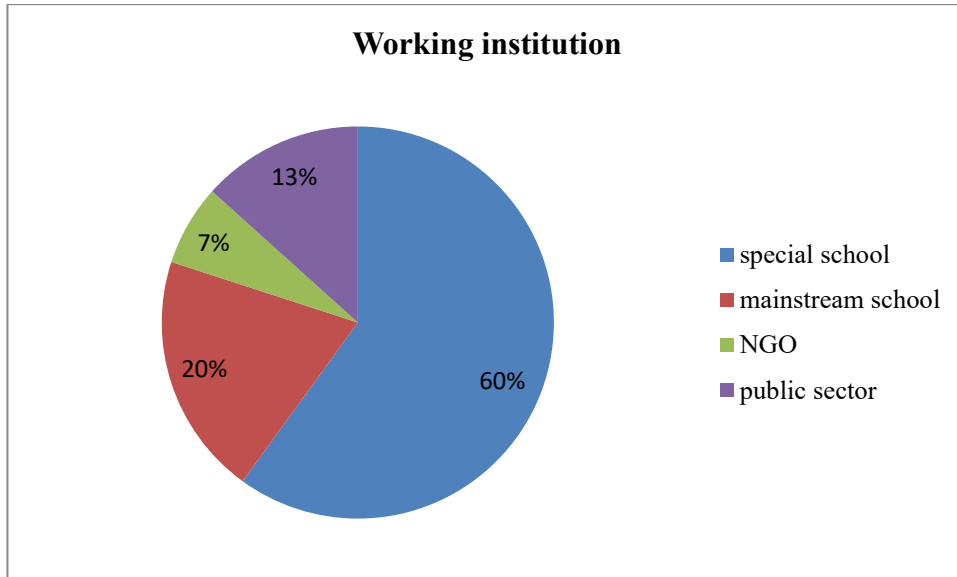


### *Belgium*

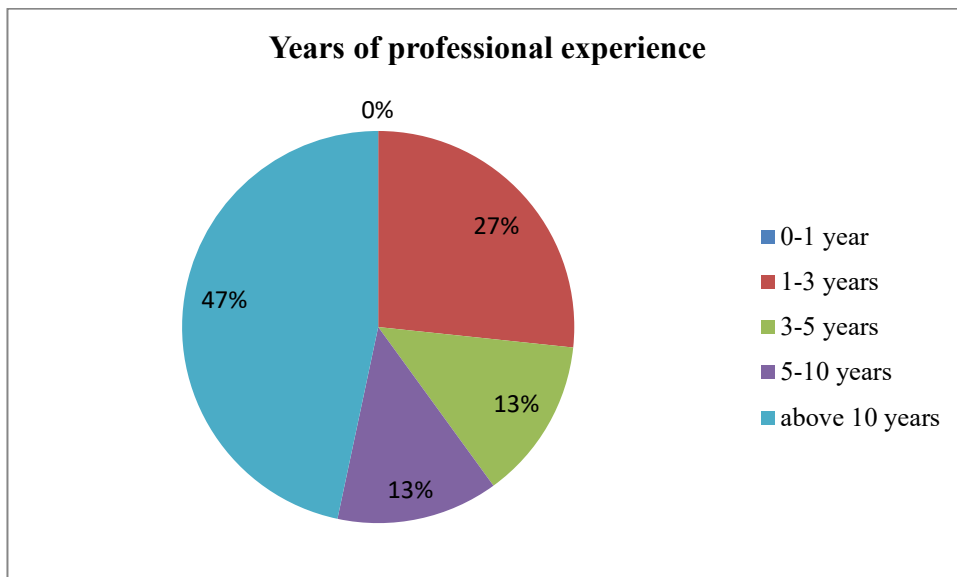
The 15 Belgian participants reported that they work as a support teacher (13%), as a teacher in special education (33%), as a speech therapist (20%) and as a manager (20%). Other declared professions are in a very small number: only one case reported for each.



The Belgian participants work in special schools (60%), mainstream schools (20%), only 7% in NGOs and 13% in the public sector.



The experience of Belgian participants is similar, in terms of percentage, to that of the other countries' professionals, as follows: 47% have more than 10 years working in their field, 27% have less than 3 years and 13% have between 3-5 years, 5-10 years of professional experience.

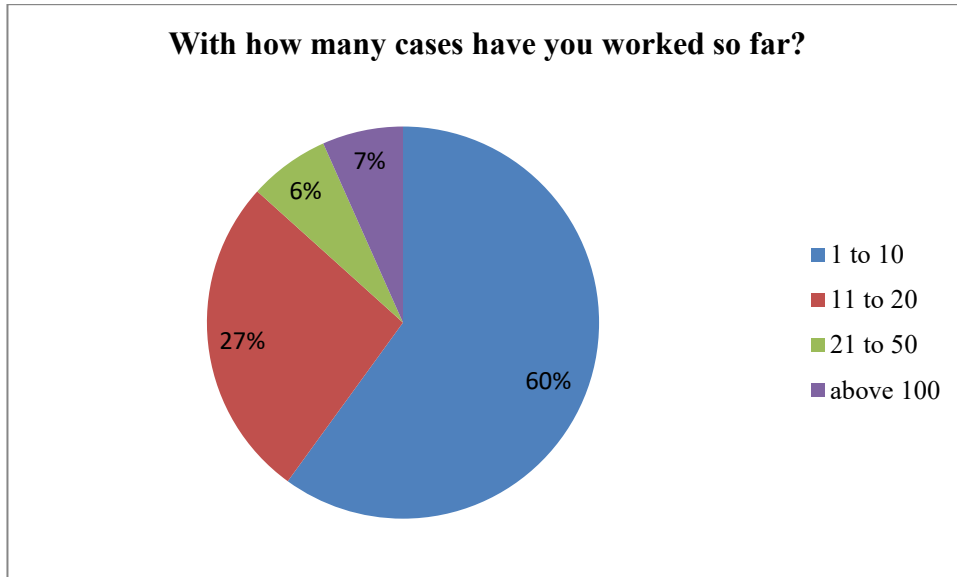


The number of autism cases that Belgian professionals managed is the following: 60% of them worked with less than 10 cases and 27% handled 11 to 20 cases. Only one respondent

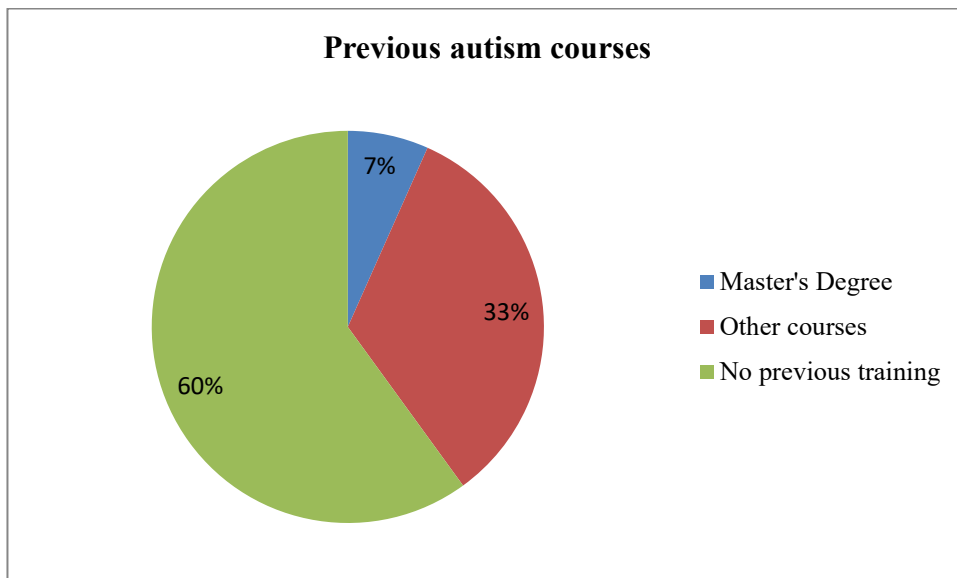




reported that he worked with 21 to 50 cases and another one worked with more than 100 autistic cases.



Concerning other training in autism, only 33% of the Belgian participants attended other training courses, 60% have no previous instruction in autism and only one respondent has a master's degree related to autism.



#### ***4.2. Quantitative need analysis***



As we stated in the Instruments section, the second part of the questionnaire includes 14 questions about their self-reported level of knowledge and the perceived training.

The means for the answers of the entire sample of 701 respondents is displayed in Table 1.

*Table 1. Means and standard deviations for the entire sample*

| <b>Question</b>   | <b>Mean (M)</b> | <b>Standard deviation</b> |
|---|-----------------|---------------------------|
| 1.1. Do you know the symptoms of autism that are described in DSM-IV or DSM-5 manual?   | 2.90            | 0.93                      |
| 1.2. How helpful will be for you a course about autism in children and adolescents?   | 3.72            | 0.64                      |
| 2.1. Do you know how to use a model or assessment tools to diagnose problem behaviour in persons with autism?                             | 2.27            | 0.92                      |
| 2.2. How helpful would be for you to attend a course on how to diagnose conduct disorders in people with autism?                          | 3.82            | 0.48                      |
| 3.1. Do you know or use a specific method or strategy to manage problem behaviour in people with autism?                                  | 2.38            | 0.84                      |
| 3.2. How helpful would be for you to attend a course about specific methods/strategies to manage problem behaviour in people with autism? | 3.88            | 0.37                      |
| 4.1. Do you know methods to improve communication skills in people with autism?   | 2.36            | 0.84                      |
| 4.2. How helpful it would be for you to attend a course on improving communication skills in people with autism?                          | 3.84            | 0.43                      |
| 5.1. Do you know or use specific methods/techniques to meet the needs of students with autism in the classroom/at school?                 | 2.43            | 0.84                      |
| 5.2. How helpful it would be for you to attend a course about improving your classroom support  | 3.82            | 0.45                      |



|   |      |      |
|---|------|------|
| skills for students with autism?  |      |      |
| 6.1. Do you know about innovative teaching technologies that support learning in people with autism?  | 1.86 | 0.80 |
| 6.2. How helpful it would be for you to attend a course about innovative teaching technologies that support learning in people with autism?   | 3.86 | 0.43 |
| 7. How helpful it would be for you to access or use an online platform, with multiple informational resources about the management of students with autism in the classroom/school? | 3.87 | 0.43 |

If we take a closer look at Table 1, we can observe that, on average, the level of knowledge regarding DSM-IV/DSM-5 criteria for autism symptoms is  $M=2.90$ ,  $SD=0.93$ , which means that respondents know something or pretty well. Similarly, the average level of knowledge concerning diagnostic tools to assess problem behaviours is  $M=2.27$ ,  $SD=0.92$ . All the other questions addressing knowledge level (about managing problem behaviours, improving communication skills, identifying classroom needs in autistic students and innovative teaching technologies in autism) reveal that participants have an average level between 1.86 and 2.43. This indicates there is a lot of room for improvement in all the investigated areas. The shortage of information is the biggest in the field of innovative teaching technologies ( $M=1.86$ ,  $SD=0.80$ ).

The items regarding the usefulness of different courses unfold an increasing interest for training, with means situated between 3.72 and 3.88. This tells us that, on average, participants consider useful-very useful to attend courses about autism in general, diagnosing and managing problem behaviours, improving communication skills and classroom support for autistic students and accessing online platform with informational resources about the management of ASD students.

The descriptive statistics for the 3 countries, for each question, is summarised in the following table. The numbers represent percentages.



Table 2. *Descriptive statistics for Greece, Romania and Belgium*

| Question  | Answer             | Greece | Romania | Belgium |
|---|--------------------|--------|---------|---------|
| 1.3. Do you know the symptoms of autism that are described in DSM-IV or DSM-5 manual?   | I don't know       | 10%    | 8%      | 13%     |
|   | I know something   | 9%     | 29%     | 34%     |
|   | I know pretty well | 26%    | 44%     | 20%     |
|   | I know a lot       | 55%    | 19%     | 33%     |
| 1.4. How helpful will be for you a course about autism in children and adolescents?   | Not helpful        | 6%     | 0%      | 7%      |
|   | So, so             | 9%     | 1%      | 13%     |
|   | Helpful            | 21%    | 10%     | 20%     |
|   | Very helpful       | 64%    | 89%     | 60%     |
| 2.1. Do you know how to use a model or assessment tools to diagnose problem behaviour in persons with autism?                             | I don't know       | 23%    | 23%     | 40%     |
|   | I know something   | 31%    | 37%     | 27%     |
|   | I know pretty well | 30%    | 34%     | 27%     |
|   | I know a lot       | 16%    | 6%      | 6%      |
| 2.2. How helpful would be for you to attend a course on how to diagnose conduct disorders in people with autism?                          | Not helpful        | 1%     | 0%      | 0%      |
|   | So, so             | 5%     | 1%      | 13%     |
|   | Helpful            | 19%    | 7%      | 20%     |
|   | Very helpful       | 75%    | 92%     | 67%     |
| 2.3. Do you have the opportunity to take such a course?   | Yes                | 95%    | 64%     | 67%     |
|   | No                 | 5%     | 36%     | 33%     |
| 3.1. Do you know or use a specific method or strategy to manage problem behaviour in people with autism?                                  | I don't know       | 15%    | 16%     | 20%     |
|   | I know something   | 36%    | 41%     | 27%     |
|   | I know pretty well | 33%    | 39%     | 33%     |
|   | I know a lot       | 16%    | 4%      | 20%     |
| 3.2. How helpful would be for you to attend a course about specific methods/strategies to manage problem behaviour in people with autism? | Not helpful        | 0%     | 0%      | 0%      |
|   | So, so             | 3%     | 0%      | 7%      |
|   | Helpful            | 16%    | 7%      | 13%     |
|   | Very helpful       | 81%    | 93%     | 80%     |
| 4.1. Do you know methods to improve communication skills in people with autism?   | I don't know       | 11%    | 19%     | 27%     |
|   | I know something   | 32%    | 42%     | 13%     |
|   | I know pretty well | 41%    | 35%     | 60%     |
|   | I know a lot       | 16%    | 4%      | 0%      |
| 4.2. How helpful it would be for you to attend  | Not helpful        | 0%     | 0%      | 0%      |



|   |                    |     |     |     |
|---|--------------------|-----|-----|-----|
| a course on improving communication skills in people with autism?   | So, so             | 5%  | 2%  | 7%  |
|   | Helpful            | 18% | 6%  | 13% |
|   | Very helpful       | 77% | 92% | 80% |
| 5.1. Do you know or use specific methods/techniques to meet the needs of students with autism in the classroom/at school?   | I don't know       | 12% | 14% | 0%  |
|   | I know something   | 30% | 44% | 47% |
|   | I know pretty well | 40% | 36% | 33% |
|   | I know a lot       | 18% | 6%  | 20% |
| 5.2. How helpful it would be for you to attend a course about improving your classroom support skills for students with autism?   | Not helpful        | 0%  | 0%  | 0%  |
|   | So, so             | 6%  | 2%  | 7%  |
|   | Helpful            | 18% | 9%  | 33% |
|   | Very helpful       | 76% | 89% | 60% |
| 6.1. Do you know about innovative teaching technologies that support learning in people with autism?  | I don't know       | 40% | 36% | 33% |
|   | I know something   | 40% | 43% | 47% |
|   | I know pretty well | 17% | 18% | 13% |
|   | I know a lot       | 3%  | 3%  | 7%  |
| 6.2. How helpful it would be for you to attend a course about innovative teaching technologies that support learning in people with autism?   | Not helpful        | 1%  | 0%  | 0%  |
|   | So, so             | 3%  | 1%  | 13% |
|   | Helpful            | 12% | 7%  | 27% |
|   | Very helpful       | 84% | 92% | 60% |
| 7. How helpful it would be for you to access or use an online platform, with multiple informational resources about the management of students with autism in the classroom/school? | Not helpful        | 0%  | 1%  | 0%  |
|   | So, so             | 1%  | 2%  | 6%  |
|   | Helpful            | 11% | 7%  | 7%  |
|   | Very helpful       | 88% | 90% | 87% |

#### ***4.3. Interpretation of descriptive statistics for Greece, Romania and Belgium***

More and more schools in Europe face an influx of children with autism. According to the statistics of several health centres on the prevalence of ASD, the disorder occurs in approximately 1 in 59 children (Baio J, Wiggins L, Christensen DL, et al.2018) and the prevalence rate of school-aged individuals (i.e. 6-17 years) diagnosed with ASD has significantly increased to 1 in 50 (Blumberg et al., 2013; Giannopolou, Pasalari, Korkoliaku & Douzenis,



2018). Although the exact number of children with autism integrated into schools is unknown, it is estimated that a significant number benefits from a form of school integration.

With the rise of autism prevalence among children, their number has increased pragmatically in public schools, which is why knowledge of the disorder and methods of classroom approach has become an extremely important topic.

There are studies that have investigated the level of autism information of professionals from various fields, like general education teachers (Finch, Watson, MacGregor & Precise, 2013; Rakap, Balikci & Kalkan, 2018; Giannopolou, Pasalari, Korkoliaku & Douzenis, 2018), speech-language pathologists (Schwartz & Drager, 2008), occupational therapists (James, Pizur-Barnekow & Schefkind, 2014). All of these studies have shown varying results in terms of knowledge, understanding and approach of autism.

This study was designed to examine professionals' general autism knowledge from three European countries, and to examine their training needs in working with children with ASD. By investigating differences among various professionals, it would be possible to determine their specific needs so that the entire multidisciplinary team working with the child with autism can improve their perception, attitude and methods of approach.

## **Symptoms of Autism**

Professionals were asked to evaluate their general knowledge of the main traits of ASD. Results show that 10 % of Greek respondents have no idea about autism traits, 8% of respondents from Romania don't have any information about autism and 13% from the Belgium respondents answered not having any clue about autism. Meanwhile, 55% of Greek respondents, 19% of Romanian participants and 33% of those surveyed in Belgium answered they have a good knowledge of autism spectrum disorder. Findings of this need analysis suggest some knowledge about autism traits among the professionals from the three countries. The situation revealed is encouraging because this means that the level of knowledge has increased in recent years (if we are referring to studies done a few years ago: Arif et al. 2013; Mavropoulou & Padeliaadu, 2000) and the attitude and perception of children with autism have been improved. However, differences among professionals who work in the three countries are observed.



## **Assessment model/tools to diagnose and manage problem behaviour**

Participants were questioned on the assessment model/ tools to diagnose problem behaviour in persons with autism. 23% from the Greek and Romanian respondents don't have any knowledge about diagnosing problem behaviour of people with autism and 40% of Belgium participants responded that they don't know anything about this issue. Overall, around 30.33% of all those investigated said they know quite well a few models or tools for assessing behavioural problems. The results obtained in this item will help us address the need for knowledge on how to assess the behavioural problem of children/people with autism. It is known that people with challenging social and emotional behaviours present a risk of attracting negative attitudes towards inclusion (Garrad, Rayner & Pedersen, 2018).

Seventy-five per cent of Greek respondents, 92% of Romanian professionals and 67% of Belgian participants say that a course about behaviour problem in autistic people would be very helpful for them. Also, in all countries, there is a great interest in classes about specific intervention strategies to manage behaviour problems. Eighty-one per cent of Greek professionals, 93% of Romanians and 80% of Belgian respondents estimate such a course would be very helpful for them.

In conclusion, regarding the topic of problem behaviours, the training needs are similar for the three countries.

## **Communication skills in autistic persons**

We know by now that communication deficits are one of the core symptoms of ASD, but the range of impairment is very wide, from completely non-verbal or simplistic language to mild difficulties in using language to accomplish social goals (Paul, 2008). Given the fact the communication is such an important milestone for social integration, we investigated the level of information among professionals and the perceived need for training in this particular domain.

When we ask participants to estimate their knowledge level about improving communication skills in people with autism, 11% of Greeks, 19% of Romanians, and 27% of Belgian professionals, report that they don't know anything about the topic. Most respondents



say that a course about improving communication skills in people with ASD would be very helpful for them (77% Greeks, 92% Romanians, 80% Belgian).

We can easily see that, regarding all the items explored so far, the highest percentage of training needs is in Romania, closely followed by Greece.

### **Classroom needs of autistic students**

Students with ASD face multiple academic challenges when attending regular or inclusive education settings. First, it may be hard for them to engage in the classroom tasks or assignments, due to environmental distractors, attention deficits, lack of motivation or conduct disorders (Denning & Moody, 2013). Second, it may be difficult for them to learn new material, particularly lessons that require mental flexibility and high processing speed (Goldstein, Johnson, & Mineshew, 2001). The third challenge comes from understanding, executing and finishing classroom assignments (Ozonoff & Strayer, 2001). All these challenges affect the process of learning for the students with ASD, but also his social integration. Therefore, the requirement to assess, understand and respond to the autistic students' classroom needs becomes a priority.

Most respondents in our survey know something or a little more about how to meet an autistic's student needs in the classroom (70% Greeks, 80% Romanians and Belgian people). However, they consider there is a lot of room for training in this area because a course on this topic would be very helpful for them. 76% of Greek participants, 89% of Romanian respondents, and 60% of Belgian professionals reported this.

### **Innovating teaching technologies**

The usage of technology has been mentioned as one of the strengths that people with ASD possess (Ramdoss et al., 2011). So, it is only natural to think about implementing teaching technologies (such as tablet applications, interactive boards, multimedia academic programs, teaching robots etc.) in the classroom with technology-prone students. However, the teachers grew in a less technology rich environment and they may not have the right knowledge or skills





for them. And even if they do, innovative teaching technologies are sometimes expensive and, therefore, less common.

The level of knowledge about innovative teaching technologies for autism was relatively low in all the 3 countries, with 40% of Greeks, 36% of Romanians, and 33% of Belgian participants stating that they don't know anything about this. From all the items reviewed so far, this is the area with the lowest level of competence. We observe the same trend when asking about training needs regarding these teaching technologies. 84% of Greeks, 92% of Romanians, and 60% of Belgian people would find such a course very helpful.

The item concerning the usefulness of an online platform, with multiple information about classroom management of autistic students, reveals similar information. 88% of Greeks, 90% of Romanians, and 87% of Belgian professionals consider this to be very helpful. We noticed that in this item, we obtained the biggest percentage for the Belgian training needs.

#### 4.4. Quantitative analyses for Greece and Romania

In order to find out if the differences between Greek and Romanian respondents are statistically significant, we ran multiple t-tests for independent samples. Belgium respondents were not taken into account due to the small number of participants (N=15), which does not allow parametric tests analysis. The results are summarised in Table 3, where significant differences were bolded.

*Table 3. Independent Samples Test*

|           | t-test for Equality of Means |     |                 |                 |                       |   |       |
|-----------|------------------------------|-----|-----------------|-----------------|-----------------------|---|-------|
|           | t                            | df  | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|           |                              |     |                 |                 |                       | Lower                                     | Upper |
| exp_years | .465                         | 682 | .642            | .052            | .112                  | -.168                                     | .271  |
| no_cases  | -.241                        | 683 | .810            | -.023           | .095                  | -.209                                     | .163  |



|   |        |     |             |       |      |       |       |
|---|--------|-----|-------------|-------|------|-------|-------|
| 1.1. Do you know the symptoms of autism that are described in DSM-IV or DSM-5 manual?   | 7.054  | 683 | <b>.000</b> | .523  | .074 | .377  | .668  |
| 1.2. How helpful will be for you a course about autism in children and adolescents?   | -9.038 | 683 | <b>.000</b> | -.445 | .049 | -.542 | -.349 |
| 2.1 Do you know how to use a model or assessment tools to diagnose problem behaviour in persons with autism?                        | 2.146  | 683 | <b>.032</b> | .163  | .076 | .014  | .313  |
| 2.2. How useful it would be to attend a course on how to diagnose conduct disorders in people with autism?                          | -5.720 | 683 | <b>.000</b> | -.219 | .038 | -.294 | -.144 |
| 3.1. Do you know or use a specific method or strategy to manage problem behaviour in people with autism?                            | 2.713  | 683 | <b>.007</b> | .189  | .069 | .052  | .325  |
| 3.2. How useful it would be to attend a course about specific methods/strategies to manage problem behaviour in people with autism? | -4.947 | 683 | <b>.000</b> | -.147 | .030 | -.205 | -.089 |
|   |        |     |             |       |      |       |       |



|   |        |     |             |       |      |       |       |
|---|--------|-----|-------------|-------|------|-------|-------|
| 4.1. Do you know methods to improve communication skills in people with autism?   | 5.382  | 683 | <b>.000</b> | .370  | .069 | .235  | .505  |
| 4.2. How helpful it would be for you to attend a course on improving communication skills in people with autism?                | -4.989 | 683 | <b>.000</b> | -.176 | .035 | -.246 | -.107 |
| 5.1. Do you know or use specific methods/techniques to meet the needs of students with autism in the classroom/at school?       | 4.379  | 683 | <b>.000</b> | .301  | .069 | .166  | .436  |
| 5.2. How helpful it would be for you to attend a course about improving your classroom support skills for students with autism? | -4.859 | 683 | <b>.000</b> | -.178 | .037 | -.250 | -.106 |
| 6.1. Do you know about innovative teaching technologies that support learning in people with autism?                            | -.692  | 683 | .489        | -.046 | .067 | -.177 | .085  |
|   |        |     |             |       |      |       |       |



|   |        |     |             |       |      |       |       |
|---|--------|-----|-------------|-------|------|-------|-------|
| 6.2. How helpful it would be for you to attend a course about innovative teaching technologies that support learning in people with autism? | -2.671 | 683 | <b>.008</b> | -.094 | .035 | -.162 | -.025 |
| 7. How helpful it would be for you to access or use an online platform, with multiple...?   | .390   | 683 | .697        | .014  | .036 | -.056 | .084  |

We have no significant differences between Greek and Romanian respondents regarding the number of autistic clients they managed and the years of experience in the field of education and autism intervention. Also, there was no notable difference concerning the knowledge about innovative teaching technologies in autism ( $M_{Greece}=1.83$  and  $M_{Romania}=1.88$ ,  $p=0.489$ ), both countries reporting a low level of knowledge. For specialists in both countries would be useful-very useful to access an online platform with multiple information resources ( $M_{Greece}=3.88$ ,  $M_{Romania}=3.86$ ,  $p=0.697$ ).

The knowledge about autism symptoms described in DSM-IV/DSM-5 is better in Greece than in Romania ( $M_{Greece}=3.27$ ,  $M_{Romania}=2.74$ ,  $p<0.001$ ) and also, Romanians have a bigger need for courses in this direction ( $M_{Greece}=3.42$ ,  $M_{Romania}=3.87$ ,  $p<0.001$ ).

Greek specialists know more than Romanian ones about using assessment tools to diagnose problem behaviours in autistic persons ( $M_{Greece}=2.39$ ,  $M_{Romania}=2.23$ ,  $p<0.05$ ), but the general knowledge level is still low. The Romanian participants report a bigger training need in this area than Greeks ( $M_{Greece}=3.68$ ,  $M_{Romania}=3.90$ ,  $p<0.001$ ).

Similarly, in Greece, respondents know more than Romanians about management methods in autistic problem behaviours ( $M_{Greece}=2.51$ ,  $M_{Romania}=2.32$ ,  $p<0.01$ ), but the average general level is low. Following the previous results, Romanians have a bigger need for courses in this direction ( $M_{Greece}=3.78$ ,  $M_{Romania}=3.92$ ,  $p<0.001$ ).



In all the other items, where we have statistically significant differences between the two countries (see Table 3), Greek participants have a better knowledge level than Romanians and Romanians signal bigger training needs than Greeks.

## **Discussion and conclusion**

Evidence-based interventions, that have been proven by repeated research to be effective, for improving outcomes for children with autism include behavioural interventions, language and communication training, social skills programs, psycho-education and occupational therapy (National Autism Center [NAC], 2015; Finch, Watson, MacGregor & Precise, 2013).

The two open-ended questions in the applied questionnaire revealed in the case of the Romanian respondents the following topics of interest for training: intervention strategies for aggressive behaviors and self-harm; specific methods of working with autistic children; specific methods of getting their attention; speech therapy protocols for autistic children; sensory integration programs; other intervention strategies other than ABA; PECS, TEACCH, play therapy and social skills programs; information useful for specialists who are “shadow” in schools for autistic children; information on how to make an adapted curriculum (for teachers); demonstrations of working with autistic children; sexuality and young people with autism; electronic, online resources, videos with successful case studies: example of an assessment of a case; individualized intervention plan.

In the case of respondents from Greece, at the two open questions, most of the responses referred to the need for practical activities, but also more natural therapeutical methods of intervention, other than strictly behavioural programs from applied behavioural analysis.

In all the three analyzed countries, there is much need for training courses regarding the following autism topics: diagnostic methods, behavioural problems, communication skills, classroom management, and innovative teaching technologies. Romanian respondents seem to need the most such courses, closely followed by Greeks. The training needs from Belgium are lower in comparison to the other countries, but the number of respondents was very small, so the results are not reliable for this well-developed European country.



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