Teacher training needs in Specific Learning Disorders in Higher Education and Adult Education – Romania, Finland, Scotland, Spain, Belgium, Greece

Cristina Dumitru Tăbăcaru, Phd, University of Pitești, Romania

#### Abstract

Higher education is becoming more and more inclusive and working towards providing access to different learners coming from diverse socio-economic backgrounds with a broad range of competences and experiences. In the actual context, the need to train teachers with more specific knowledge and skills to be more prepared to address the diverse learning needs of their students is crucial. The objective of the present study was to identify and capture the profile and professional needs of university teachers when it comes to include students with specific learning disorders into their classrooms. This study was conducted as a part of collaboration between University of Pitesti in Romania, University of Laurea in Finland and other four organizations working in adult education LogoPsyCom in Belgium, Creative Learning Programmes (CLP) in United Kingdom, European Education & Learning Institute (EELI) in Greece and INCOMA in Spain. An anonymous voluntary 17-item web-based survey was distributed to professionals working in higher education institutions and adult education organizations. The indicators followed during the need assessment study were: identifying discrepancies, prioritizing discrepancies, causally analyzing needs, preliminary identification of solution criteria and possible solution strategies. The sample investigated was formed by 123 teachers (trainers, educators) from the partnership countries. University professors are interested in a training program on SLDs and the analyses of the survey shows lack of background and experiences in working with students with SLDs, a great number of teachers are not even aware that they might have students with learning disorders, they are also recognizing the lack of support mechanism, techniques, or motivations from the administration and procedural aspect.

**Key words:** Specific Learning Disorders, Higher education, Teacher Training Needs, Inclusion, Inclusive Learning Environment

#### Introduction

Higher education has large implications on performance for all members of society, and aims to improve social equity and mobility as well as social cohesion and integration (Brennan & Teichler, 2008). The impact of a high-quality teaching on raising standards and transforming educational outcomes continues to incite researchers' interest (Mansfield, 2021), the mission of a good university is to build up a knowledgeable society on three pillars - education, research and socioeconomic development (Karpov, 2019). Higher education institutions serve to provide access to social prestige and income-earning (Marginson, 2006) and contribute to independence of citizens by investing in their readiness to social inclusion (Lawani et al., 2021; Márquez & Melero-Aguilar, 2021). Governmental policies and funding of disability targeted support services and programs in higher education to ensure access to education to vulnerable groups by offering long-term benefits of human capital development (Diaz-Caneiro, 2019). The number of students with disabilities enrolled in higher education programs is increasing on an international level (Hadjikakou & Hartas, 2008). Higher education programs opened to diversity of the student population, providing access to different learners coming from diverse socio-economic backgrounds with a broad range of experiences (Coman et al., 2020), becoming crucial to train teachers with more specific knowledge and skills to be more prepared to address the diverse learning needs of their students

(Gleason & Cherrez, 2021). In spite of internationally recognized significant increase of students with Specific Learning Disorder accessing higher education programs (Matteucci & Soncini, 2021), university teachers are yet to have the knowledge to adapt the content, their teaching strategies, assessment methods and learning community support to a more appropriate learning environment for students with learning disorders. University teachers still have negative attitudes towards students with disabilities (Ryan, 2011).

## **Specific learning disorders**

Specific learning disorders (SLDs) is an umbrella term (Wang & Chung, 2021) used to describe a heterogeneous group of developmental disorders (Snyder & Cummings, 1998; Kulkarni et al., 2001) characterized by significant unexpected, specific and persistent difficulties in the acquisition and use of efficient reading (dyslexia, phonological processes, orthographic-phonological connections, and/or fluency (rate, automaticity, or executive coordination) (Berninger, 2001), writing (dysgraphia) or mathematical (dyscalculia) abilities (American Psychiatric Association, 2013). SLDs encompass difficulties with listening, speaking, reading, spelling or doing mathematical calculations (Kumar & Agrawal, 2019). Reading, writing and mathematics skills are key academic skills (Azizi et al., 2018), the foundation for other academic learning (Abdelraouf et al., 2018). The main symptoms that can also interfere with independent learning required at university level can be poor short-term memory (Kavale. & Flanagan, 2007), attention deficits (Dainer et al., 1981; Marzocchi et al., 2009), difficulty in academic and learning tasks (Esmaili et al., 2016), poor motor skills (Barnes et al., 2007) and motor-related daily functions (Tal-Saban & Weintraub, 2019), inefficient planning and organization (Hendriksen et.al., 2007), processing problems (Chatzara et al., 2014; Cornoldi et al., 2019), difficulties in organizing information and developing learning and cognitive skills (Shenoy, 2016), challenging access to the constant cognitive effort necessary for the rote learning of facts, figures and procedural rules (Savidis et al., 2007), IQ-achievement discrepancy between potential and achievement (Berninger, 2001; Lerner & Johns, 2011), significant gap between the true potential and the day to day performance (Kulkarni et al., 2001), disruptive behaviors (Chatzara et al., 2014), despite age-appropriate instruction, long-term remedial efforts (Kirk, 1962; Addison Stone, 1980), normal intelligence, motivation to learn, adequate socio-cultural and learning opportunity (Katz et al., 2011; Wang & Chung, 2021). The child with SLDs do not outgrow their difficulties as they reach adolescence, they continue to interfere with learning in adult education settings. They often require unique educational supports to succeed (Benney et al., 2021), even during their Higher Education studies. SLDs students continue to have certain degree of emotional problems (insecurities, low selfesteem, test anxiety (Wang & Chung, 2021), cumulative experiences of failure (Kohli et al., 2005; Goetz et al., 2008). Studies show higher anxious symptomatology (70% of students with SLDs than their peers (Nelson & Harwood, 2011) and lower levels of resilience (Panicker & Chelliah, 2016). SLDs correlate with high incidence of emotional lability (van der Oord & Tripp, 2020), emotional and behavioral problems (Svetaz et al., 2000) which represent the main causes of poor school performance (Karande et al., 2005; Yousefi et al., 2010). Students with SLDs are vulnerable to dropping out of university (Kumar & Agrawal, 2019).

Even in adult education programs, students with SLDs continue to struggle in their learning process, and it might worsen if not addressed appropriately to support learning, increasing significant stress in the academic environment (Panicker & Chelliah, 2016). Difficulties reported were in communication between SLDs students and teachers, limited interaction between them (Chatzara et al., 2014), mostly because of the low sense of belonging to a team sharing common

goals in learning, facing common problems (in comprehending knowledge) and sharing common emotions related to learning (Klassen, 2010). Studies (Howard et al., 2000; Sandhu, 2018) show the impact of self-regulated learning on successful learning because it allows students to rely on their individual abilities to direct their learning by using self-regulated strategies (monitoring and managing their performance (Kinnebrew & Biswas, 2011), following certain procedures to complete successfully learning tasks (Chatzara et al., 2014), being goal orientation and task engagement (Pintrich, 2004), having good self-management (Chatzara et al., 2014), high selfefficiency beliefs (Bandura, 1993; Butler & Schnellert, 2015). The impact of a positive attitude of teacher is crucial to create a social learning environment (Brischetto & Rinaldi, 2020), to offer support, guidance and feedback during learning (Panshikar, 2019), to motivate and engage students in during learning experiences (Berninger & Joshi, 2016). Deficits in self-efficacy (Benney et al., 2021) are followed by hopelessness and low connectedness mostly with the awareness of one's "difference" (Addison Stone, 1980). SLDs students continue to struggle also in universities, mostly if the studies are done in a foreign language or the filled of their studies are languages, especially if it is foreign languages when in addition is to the native language are accumulated other difficulties specific to the new languages (Cline, 1998; DiFino & Lombardino, 2004). Students with SLDs struggle in all aspects of learning a foreign language due to poor phonological processing and other difficulties "conceptual in nature" of their own native languages (Nation et al.,1999). Saffran (2018) claims that a full picture of how native language is acquired and other languages are learned and is not yet available. But researches (Konicarova, 2014) are done to find effective ways of learning languages. Some techniques proposed were to develop oral language which would be a precursor to reading success (Shenoy, 2016), a better setting of the learning objectives and outcomes (Brady & Shinohara, 2000), practicing motor and linguistic skills within peer learning groups (Lloyd et al., 2006), background knowledge with a great role in reading (Shenoy, 2016), an autonomous and interdependent decision making and acquisition of knowledge and skills (Konicarova, 2014). During their learning experiences students with SLDs are developing strategies to increase their reading skills, but studies (Benney et al., 2021) show lack of support services to meet individual social-emotional and academic needs of students with SLDs and address academic stress or deficient self-efficacy (Panicker & Chelliah, 2016). Teachers should be trained to be able to provide support and accommodation to both for academic and social-emotional needs of their students with SLDs, therefore training programs preparing universities professors and trainers from adult education with appropriate knowledge and skills is crucial for academic and professional success.

Some characteristics of students with SLDs that can make learning at university difficult might be: summarizing and outlining, answering open-ended questions on tests, slow-pace in working, poor grasp of abstract concepts, little attention or exaggerate focus to details, misreading information, difficulties in finishing or handing in on time their assignments; difficulties with planning and time management (Kulkarni et al., 2001), difficulties in adjusting appropriately to their university life, "mainly due to the inappropriate establishment of goals or motivations" (Torres et al., 2019).

## Teacher Training on SLDs and inclusive approach to teaching

An inclusive environment is important to be cultivated in universities as well as an indicator of quality (Márquez & Melero-Aguilar, 2021), and the main is to provide a flexible learning environment to enable students to engage in their professional and personal development and supports self-determination and empowerment (Covelli et. al., 2019), to provide individualized teaching assistance and be able to use a broad range of tools to make accessible the curriculum to

special needs of students. Teacher training is designed to influence and empower university teachers in using inclusive tools and techniques (Lawani et al., 2021) and be able to build resilience to their students (Fernandes, 2021). Therefore, highly competent teachers have great impact in raising standards and transforming educational outcomes (Lawani et al., 2020; Fernandes, 2021). For reaching an inclusive environment in universities and Adult Education programs, investment in human resource development and training should be done. Initial and continuous teacher training is crucial for quality improvement of education. Researches confirm the importance of identifying teachers' needs by needs assessment processed before implementing any training program (Bartholomew et al., 1998; Gaspard & Yang, 2016; et al., 2020). For an efficient teacher development need assessment is an essential step to undertake with capturing the profile and professional needs of all groups involved in the process (Markaki et al., 2007) for a better identification of knowledge gaps, false beliefs, and limited skills with regard to inclusive practices (Weegar & Romano, 2019).

A learning group (Savidis et al., 2007) consisting of students with SLDs is a highly challenging and demanding process (Savidis et al., 2007) that can be effectively improved with empowering university teachers with competences to adapt their teaching to the needs of their students. Working with students with SLDs is a highly challenging and demanding process (Savidis et al., 2007) that can be effectively improved by providing teachers with qualitative training. The overall objective of a good training is to provide solid knowledge on SLDs based on design for all and universal access (Trow, 2000; Jacko & Hanson, 2002) and Universal Design of Learning (Rose & Strangman, 2007; Hall, Meyer & Rose, 2012) principles and practical tools to be used to adapt the content to be learned and teaching methods to ensure access to learning for students with SLDs, accompanied by motivational techniques to engage teachers in the inclusive process and also to motivate and engage their students in their own learning. Studies (Savidis et al., 200) recommend to include into the training curriculum a more effective and flexible approach to learning and teaching and integrate e-inclusion of software applications and services when choosing or designing appropriate development strategies, for providing accessibility and a good quality interaction between teachers and students or modeling trial-by-trial of professional competencies fostered by positive feedback (Jones et al., 2014) and promoting community of learners which will enhance the feelings of relatedness with other learners and teachers associated with higher selfesteem, better adjustment in university life and greater self-worth (Cameron et al., 2010; Vanhalst et al., 2013; Jones et al., 2014)

In *Romania* little has been done to develop training or other supports for teachers in Higher Education to assist students with SLDs or other disabilities. The main findings of the present research state some good steps undertaken by Romanian government in the process of offering a good quality education to students with learning disorders, however little information is available with regards to the situation of learning disorders students in the higher education system and the support available for learning needs of this segment of students. There is no available statistics regarding the number of students with learning disorders currently enrolled in higher education system or in adult education programs (Dumitru, 2019). The analysis of training providers in the area of adult and higher education (Popovici & Agheană, 2017) urges the need to raise awareness of the need to develop training that would enable teachers and educators to be more aware of the possibility to have students with learning disorders in their classes and the impact of a good

educational approach and the need to develop strategies in accordance with their learning needs is crucial to a qualitative education. The lack of training targeting adult educators and professors from universities needs to be addressed in order to develop programs that will be able to accommodate all learning needs of students (main target group for training on SLDs are teachers from pre university level).

In the United Kingdom policy is based upon individual action and reasonable adjustments. Laws outlawing discrimination, promoting equality and ensuring that the rights of disabled people exist, especially in education where fair outcomes are the aim. Studies (Hehir et al., 2016; Layer, 2017; Wray, 2019) shows how the UK Government is beginning to recognize the benefits of inclusive education in higher education, and slowly is changing its approach. The report (Layer, 2017) encourages higher education providers to look at how they can support and offer the best environment for disabled students. Inertia is the only thing slowing down the implementation of inclusive education in the UK nationally, and one would imagine that it would become the norm soon. Today however, the lack of a cohesive policy structure in the UK about inclusive education in Higher Education means outcomes are based on non-violation of the Equality Act (2010). Incentives to provide genuine inclusive education are not there. There exists an assumption that young people will have already adjusted themselves into mainstream education by the time they reach higher education. A university or other higher education institute's typical default position is to make individual adjustments based on a medical model of defining disability, and someone with special educational needs will often have to apply to receive the necessary support. Wray (2019) states that the main obstacles facing inclusive education in higher education in the UK arise from disjointed policy and funding, reliance on medical models of disability, and a lack of a clear baseline.

In *Finland* higher education is based on a dual model: the universities of applied sciences serve the needs of the local labor market by providing bachelor's degrees e.g., in fields of social services, nursing, business administration and engineering in addition to applied research. Universities, on the other hand, promote freedom of research and give education of the highest level (Ministry of Education and Culture, 2020). In order to qualify as a teacher in higher education, a master's degree is a minimum. Both pre-service & in-service teacher training is mainly provided by the same institutions, i.e., universities and Schools of Professional Teacher Education that function as units of Universities of Applied Sciences. As further studies, teachers can qualify as special needs teachers by completing a 60-credit course. Inclusive education is one of the pedagogical themes in the curricula, with varying foci and scope. Courses of special needs education are also accessible via open university. In addition to this, there are also NGOs that conduct short-term training and offer both digital and practical tools for inclusive education. Non-discrimination Act (1325/2014) requires that everyone has the same opportunities to learn and study. Current legislation (Universities Act 558/2009, Universities of Applied Sciences Act 932/2014) does not specifically require higher education institutions to provide services of a special needs teacher, but in practice all universities and universities of applied sciences in Finland have a special needs teacher or a study support teacher. Higher education institutions are required to offer students support measures, such as flexible ways to work on learning assignments and complete courses, as well as the services of a student counsellor and psychologist. Universities of Applied Sciences offer

versatile ways to proceed with one's studies, such as work-based learning and demonstration of competence. Students have a right to practical support measures and special arrangements, for example additional time in exams and finalizing reports, using audiobooks or oral exams, if they have a diagnosed learning disorder. Often students' learning difficulties are diagnosed already in primary school, but, for example, reading difficulties can be diagnosed during university studies. Higher education teachers are currently not offered training in inclusive education, but individual teachers seek information and strive to develop their pedagogy towards more inclusive teaching. It is important to take into account different learners in order to make higher education equally accessible to all.

In *Belgium* there are structures in each institution to apply the accommodations needed by students with special needs even in higher education institutions. The support service provides to each student a custom-made plan, elaborated approved and signed both by the dean of the faculty and the student, to allow students to have access to studies without discrimination (Gemou & Bekiaris, 2009) while maintaining the level of requirements of the institution. There is a rise in this type of demands for special accommodations in the past years (Mouhib, 2018), this represents a stronger effort in the field and a work increase in the services that provides students the accommodations they need to ensure access to education without barriers (van Kessel, 2019). Most of the training in Belgium related to inclusion in Belgium are organized in a conference format, not as a recurring permanent program (Mouhib, 2018).

In *Greece* legislation has a significant impact on the process of overcoming disabling conditions (Giovazolias et al., 2010). Yet, in practice, the legislation is still not fully supported by the creation of the adequate infrastructure and resources that would help its implementation. If we presume that equal educational opportunities means that all children during an academic year should be taught specific instructive material of equal length and in the same way, then it would not be a surprise that some children show extreme behavior or cannot perform according to the standards of school records. Furthermore, there are important policy concerns about the quality and coordination of teacher induction programs and in-service education, as many of these programs lack a systematic evaluation of their effectiveness, and many different in-service education programs have not been satisfactorily coordinated. These concerns led to the latest establishment of a new organization, "The Organization of In-Service Training of Teachers" (OEPEK), to coordinate and upgrade in-service education. This could be the solution to the lack of basic knowledge of teachers on special needs and how children with these needs can be included in the mainstream.

According to the policies and strategies found in *Spain*, it could be said that Inclusion Education has started to develop, a great deal has already been done and there is still a great deal to do (Parrilla, 2008; Iglesias et al., 2010). Spain is a country in which social fabric is crucial, they make it further than the government. The government offers financial help for people with disabilities and their family, but association helps them also with educational and daily support. Federation created for specific disabilities has moved the country in order to support people who work with disability persons in order to train them, as Plena Inclusión makes, for instance. The strategies proposed in 2011 by the Ministry of Health, Social Policy and Equality have been carried out,

although, further progress is needed to reach a social awareness of people with disabilities in adult education.

# Methodology

The present article has concentrated on assessing the needs of teachers (or trainers) working in universities and adult education in improving their educational services making them accessible for specific needs of students. This study was conducted as a part of collaboration between University of Pitești in Romania, University of Laurea in Finland and other four organizations working in adult education LogoPsyCom in Belgium, Creative Learning Programmes (CLP) in United Kingdom, European Education & Learning Institute (EELI) in Greece and INCOMA in Spain. The main objective was to identify the training programs and best practices on inclusive education and on SLDs available for teachers in Higher and Adult education and to explore the training needs for the professionals in SLD from the above-mentioned countries. The follow-up of the present research would materialize in the pursuit of an integrated inclusive training on SLDs for teachers, trainers and educators from universities and adult education organizations.

## Research question

- RQ1: What do university teachers already know about SLDs
- RQ2: Why are university teachers interested in learning about SLDs
- RQ3: What do university teachers want to know about SLDs

## Needs analysis objectives

The authors investigated the attitudes, self-perceived knowledge, and the need for a training that would enable them to offer a high-quality program for students with SLDs. To identify the best approaches to design training for healthcare professionals.

### Methods

An anonymous voluntary 17-item web-based survey was distributed to professionals working in higher education institutions and adult education organizations organized in four different sections: collection of *general data* (on occupation, subjects, awareness of the existence of learning disorders among their students and availability of support services for students with disabilities in their organizations), *foreign students with SLDs* (in order to evaluate the potentially different needs of foreign students and if there are different learning patterns that apply to foreign students whose first language is not the language of instruction), *distance learning* (for collecting data about the impact of adoption in education technology due to COVID on students with SLDs), *training needs* (challenges and expectations they would want to answer during their courses with students with SLDs).

### *Implementation process*

A semi-structured questionnaire was designed and implemented online during the month of February of 2021 to university teachers and adult educators in Romania, Finland, UK, Belgium, Greece, Spain. The questionnaire was sent by e-mail to 320 educators and experts in higher education on the topic of learning disorders. These questionnaires were completed by 123 teachers from universities in Romania (University of Pitești, University of Bucharest, University Ștefan cel Mare în Suceava, Pedagogical State University Ion Creangă, Chisinau), Finland, Belgium, Greece, Spain, United Kingdom for centralization and interpretation.

#### Research dimensions.

The investigated concepts were defined as follow:

- *Training needs* are in fact learning needs of members of an organization that can be met through training and professional development activities.
- *Need* is the discrepancy or difference (distance) between the current level of development of a group or situation and the desired level (possible to be achieved). The need reflects the existence of a problem that requires intervention, a problem that needs to be addressed.
- *Needs analysis* seeks to identify such gaps, analyze their characteristics and cause, and set priorities for future action.

#### Research indicators.

In order to complete the picture of the training offer to be addressed to teachers in the higher education system, a series of aspects related to the opinions of the teachers regarding the training programs, as well as their opinions on the quality, respectively the deficiencies noted in the completed programs were the subject of questionnaires and discussions during the focus-group. In the context of this study, the tools include an important number of qualitative items, for which the main indicators used in processing were those related to the distribution and structure of subjects on different characteristics studied. The indicators followed during the need assessment study were:

- Identifying discrepancies
- Prioritizing discrepancies
- Causally analyzing needs
- Preliminary identification of solution criteria and possible solution strategies

### Data Collection

In order to collect information on the need for training a survey was conducted, by applying a semi-structured questionnaire. The questionnaire for teachers regarded the analysis and identification of the need for continuous training and professional development. The data from the questionnaires were verified with the data from 1 focus group organized with university teachers. The aim of the questionnaire was to assess their learning gaps and actual needs in the educational context and evaluate the potentially different needs of students with learning disorders (including foreign students). The target audience for the need assessment was teachers mainly from higher education institutions. The sample investigated was formed by 123 teachers (trainers, educators) from the partnership countries and can be visualized below (Table 1). Typically, university professors were reluctant to participate in such research.

Table 1 Demographic characteristics of respondents (N= 123)

Variable	N (%)
Gender	
Female	84 (68.29)
Male	39 (31.70)
Age (years)	

Median	46.42 (range 29-71)
Professional background	
Higher education teachers	99 (80.48)
Adult educators	16 (13.00)
Other	8 (6.50)
Professional category	
Professor	54 (43.90)
Associate professors	20 (16.26)
Lecturer	19 (15.44)
Trainers	20 (16.26)
Others (educators in vocational	10 (8.13)
education or colleges)	. ,
Field of knowledge	
Humanities (History, Languages	38 (30.89)
and literature, Law, Philosophy, Theology)	
Social sciences (Psychology,	37 (30.08)
Sociology, Social Work, Pedagogy)	
Natural Sciences (Chemistry,	8 (6.50)
Formal Sciences (Mathematics,	18 (14.63)
Building Structure, Building Materials,	
Process, Business administration,	
Marketing, Financial Accounting and	
Financial Statement Analysis, Computer	
Science, Statistics	
Applied Sciences (Medicine,	9 (7.31)
Arts (Architectural Design	7 (5.69)
Vocational programs (beauty, spa	6 (4.87)
therapies	

## **Data Analysis**

The data analysis process followed a quantitative methodology and it was accompanied with qualitative methodology based on focus groups with an open coding process (Miles et al., 2014). This article presents the results on participants' level of knowledge about SLDs and their practical techniques to ensure inclusive education. All 123 research participants responded to the openended question coded on a Likert scale with 5 response points, ranging from strongly disagree to strongly agree, (also open questions were coded using the Likert scale on their level of knowledge on SLDs and inclusive practices). From a technical point of view, the design of the survey aimed, in addition to the information related to the training system, to highlight the support services for students and teachers at institution level. Among the characteristics considered to have great impact on the results of the study, the analysis addressed socio-educational environmental factors related to professional characteristics of the teacher, the field of knowledge, the system or mechanism in place to manage the needs of students with SLDs and the type of educational institution they work for. The most represented were university professors (80.48%) and adult educators (13%), working in humanities sciences (30.89%) and social sciences (30.08%). The data collected from the survey have shown varying results in terms of knowledge, understanding and approach of SLDs across partnership, from very little awareness on higher education level in Romania and Greece to some steps taken towards building up a culture of providing support for SLDs during their professional development in Finland, Belgium, Spain and UK.

### Findings and observations

University departments are gradually introducing an inclusive department to support various educational needs of students with SLDs, attract student interest and help reinforce learning objectives. In addition, this research offered perspectives on how to design training based on actual needs of teachers and serves as a reference for developing curriculum for professionals working in similar contexts. The findings suggest that it is highly crucial to provide teachers with opportunities to understand SLDs and get to know the characteristics and specificity of how students with SLDs learn. The training needs of teachers working in higher education were prioritized and it was identified as requiring maximum development, to stimulate teacher motivation towards inclusive education and raise awareness and give significance to those types of knowledge. Providing training according to needs is vital especially in a field as education due to its impact on the development of the society and on the quality of life of its citizens.

The relevant finding was that of the surveyed teachers, only 30 % had undergone previous training on SLDs which indicates that there is a knowledge gap at university level when it comes to providing an inclusive setting for students with SLDs. The majority of respondents (83.73 %) are aware of the existence of learning disorders among their students and it should be stated that the survey was distributed to a large group and the response rate (30%) might be associated with the lack of interest to SLDs or lack of awareness towards this field and the ones sensitive to the subject tend to be more receptive to answering and participating in projects involving inclusive education.

Of all the participants, 30.89% (n=38) declared that there is no system or mechanism in place to manage the needs of students with learning disorders in their institution, 20.32 % (n=25) declared they knew nothing about a system or mechanism in place to manage the needs of students with learning disorders in their institution and the most of respondents said that within their institution there is a system managing the needs of students with disabilities 48.78% (n=60). With regard to the most important needs of students with learning disorders identified by quantifying teachers' opinion, the most frequent answer was the need to have appropriate learning settings based on individualized teaching approach, use of technology and other technical equipment (39.46%), as well as the need of professional support, social-emotional support (38.61%), followed by the need of having efficient ways to communicate and convey information and learning content (16.53%). The need to have more time to be able to make all the assessments and activities required for the study program was also mentioned, as well as the need to have flexible assessment, counselling activities for learning, additional explanations for in-depth understanding that can be correlated with other answers which refer to the same aspect, the need to benefit from remedial activities and learning recovery opportunities. Also, a number of respondents (15.38%) couldn't identify any needs that students with learning disabilities might have. The needs identified by teachers are mostly general needs a student might have during his/her learning process and they are not very linked to the specific needs of students with learning disorders. The respondents (54.47%, n=67) stated that they have limited qualification to respond to the needs of their students with SLDs and make all necessary accommodation to ensure an inclusive environment. The most important needs of foreign students with learning disorders identified by quantifying teachers' opinion, the most frequently mentioned answer was the need of adequate teaching/assessment methodology, teachers' awareness of their learning disorders, adequate response from the institution regarding their integration (34.61%), followed by the need to receive support, encouragement and positive appreciation in the process of performing academic tasks (25.17%). Only 30.76% of teachers consider that students with learning disorders need to have access to information and be able to

develop effective communicative strategies, as well as the need to be approached with efficient communicating ways by their teachers. Afterwards, the need to have emotional support and counselling activities to help students integrate into the study program (7.69%) was mentioned, as well as the need to develop coping strategies with the language barrier, access to different tools that would help with learning the foreign language (access to dictionaries, conceptual index), professional help in their native language. Also, a number of respondents (15.38%) couldn't identify any needs that foreign students with learning disabilities might have. The needs identified by the teachers are mostly general needs a student might have during his learning process and they are not very linked to the specific needs of students with learning disorders, but we could also identify the needs of a foreign student in accessing a study program in a language other than his native language.

With regard to the specific that foreign students with learning disorders might have for adapting to a distance learning environment and what is needed from the teacher to help them in the process identified by quantifying teachers' opinion, the most frequent answer mentioned was the challenge to social interaction and the solution proposed was individual approach, private tutoring (23.07%). Some respondents stated that students with learning disorders need supplementary learning support, online counselling, creating learning communities for students with learning disorders. Other recommendations are special examination conditions, extended time, adaptation of evaluation format, specific equipment or software, digital competencies, virtual homework consultations, more time for learning activities, personalized e-learning strategies.

The findings show that teachers are in need for a training program on learning disorders and quite a high number of them (50%) are not so confident in their competences and abilities to work with learning disorders students. When it comes to participants' expectation about the training, what they would like to learn regarding the work with students with learning disorders and what resources they think it would be useful for them, research respondents expressed the following ideas: to get more knowledge on learning disorders, more practical tools, resources, practical examples and good practices; to get insight of practices in this subject, instructional design and teaching methods adapted for students with learning disorders, psychological approaches and special didactic support, ICT technologies appropriate for learning disorders, how to make and adapt content and course material for learning disorders, educational resources to help them adapt the learning contents, catch student's attention and keep their attention focused, to help them memorize the information. The results show a special interest of teachers in acquiring the knowhow in designing and implementing personalized supporting measures, providing appropriate of tutorship, adaptation of examination formats, compensatory tools, and dispensatory measures. Areas of interest included using techniques to develop good self-management skills, organizational skills, to share and exchange of best practices on inclusion, building up community of learners, to provide specific guidance and how to provide individual support to students with specific needs, but a sensitization campaign for the rest of the students is also needed, to integrate ICT into the teaching and make it friendly for SLD, practical support services, mechanisms and techniques, to design platforms with for teachers and students with necessary information on SLDs and inclusive practices. Some conclusions can be drawn from these data, which will be useful to a better design of the training in accordance with the real needs of university professors to improve the quality of educational programs offered to students with SLDs. University professors valued the learning opportunities to gain knowledge on the theory and practice of inclusive approach to teaching students with SLDs and to apply the knowledge gained through educational contexts.

On the university level and adult education, the available opportunities are workshops and conferences, but those can just open up the need to get more information and understand the learning needs and the actions to undertake to ensure an accessible education for all students. Another problem identified is the lack of knowledge (assessment) with regard to the possibility to encounter a student with learning disorder during their courses. So, one main direction could be to offer training programs, projects that could raise awareness about learning disorders and how to identify them and main recommendation to adapt learning content, materials, evaluation process to the educational needs of students with learning disorders. Teachers and adult educators need to be provided with necessary information on the specificity of learning disabilities; knowledge of the characteristics of each specific learning disorder; educational and didactic strategies for development and compensatory aid; how to support and assist students in their learning process and help them organize, monitor and evaluate their own learning; forms of guidance and support for the follow-up studies and practical activities; ways of collaborating of teachers with other professionals that can foster educational and social inclusion process.

The main conclusions regarding the situation of teachers' knowledge and skills with regard to their possible students with learning disorders are: lack of background, experience at a university level (learning disorders are quite new for the educational environment, they only started identifying learning disorders at the level of primary school, and for the actual students that might have learning disorders, there was no previous diagnose, support); gap in knowledge, skills, attitudes towards accommodating their teaching process (tools, materials, assessment and evaluation tools) to educational needs of students with learning disorders); lack of support mechanism, techniques, infrastructure and facilities for students with learning disorders, resources centers (departments) within universities or adult education providers for students with learning disorders, open educational resources on learning disorders for students, teachers, professionals or available trainings.

### **Conclusion**

In conclusion, the professional in higher education system are interested in a training program on SLDs and the analyses of the survey shows lack of background and experiences in working with students with SLDs, a great number of teachers are not even aware that they might have students with learning disorders, they are also recognizing the lack of support mechanism, techniques, or motivations from the administration and procedural aspect. University professors are in need for knowledge and skills to start building experience through research, reading, coaching or formal training on learning disorders, they are aware of that and according to the findings, their attitude and motivation for a training program on learning disorders are quite high. They identified quite specifically their training needs. Self-perceived competence and comfort level was found to be low and the development of future training programs should address those needs.

## **Limitations of the Study**

The presented results on teachers from higher education institutions needs is not exhaustive and cannot be generalized for the entire population, due to the small number of respondents reached through our research initiative. More empirical studies are needed to examine how are the teachers prepared to provide an inclusive educational environment, what are the needs of professors when it comes to professional development needed to acquire the crucial knowledge and competences to transfer it into teaching practice. Additional research is needed to explore the educational needs

of students with SLDs and the compatibility of those needs with the need of their teachers to build up a positive climate that would facilitate a good quality education.

# **Funding**

The paper is presenting the results of a Needs Analysis and a Good practices analysis of Romania, Finland, Greece, Belgium, Scotland, Spain, in the framework of Tools for Inclusive Education (ToFIE) Project (no. 2020-1-FI01-KA203-066571), financed by European Commission, within ERASMUS+ KA201. The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

#### References:

Abdelraouf, E.R., Kilany, A., Hashish, A.F. et al. (2018). Investigating the influence of ubiquinone blood level on the abilities of children with specific learning disorder. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery.* 54, 39 <a href="https://doi-org.am.e-nformation.ro/10.1186/s41983-018-0029-8">https://doi-org.am.e-nformation.ro/10.1186/s41983-018-0029-8</a>

Addison Stone, C. (1980). Adolescent cognitive development: Implications for learning disabilities. *Bulletin of the Orton Society* 30, 79–93 <a href="https://doi-org.am.e-nformation.ro/10.1007/BF02653710">https://doi-org.am.e-nformation.ro/10.1007/BF02653710</a>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington: American Psychiatric Association Publishing

Azizi, A., Drikvand, F.M., Sepahvandi, M.A. (2018). Comparison of the Effect of Cognitive Rehabilitation and Neurofeedback on Sustained Attention Among Elementary School Students with Specific Learning Disorder: A Preliminary Randomized Controlled Clinical Trial. *Applied Psychophysiology and Biofeedback*. 43, 301–307 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10484-018-9410-8">https://doi-org.am.e-nformation.ro/10.1007/s10484-018-9410-8</a>

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28 (2), 117–148.

Barnes, M. A., Fletcher, J., Fuchs, L. (2007). Learning disabilities: from identification to intervention. New York: The Guilford.

Bartholomew, L.K., Parcel, G.S., Kok, G. (1998). Intervention mapping: A process for developing theory and evidence-based health education programs. *Health Education & Behavior*. 25 (5): 545–63.

Benney, C.M., Cavender, S.C., McClain, M.B. et al. (2021). Adding Mindfulness to an Evidence-Based Reading Intervention for a Student with SLD: a Pilot Study. *Contemporary School Psychology* <a href="https://doi-org.am.e-nformation.ro/10.1007/s40688-021-00361-w">https://doi-org.am.e-nformation.ro/10.1007/s40688-021-00361-w</a>

Berninger, V.W. (2001). Understanding the 'Lexia' in dyslexia: A multidisciplinary team approach to learning disabilities. *Annals of Dyslexia* 51, 21–48 <a href="https://doi-org.am.e-nformation.ro/10.1007/s11881-001-0004-3">https://doi-org.am.e-nformation.ro/10.1007/s11881-001-0004-3</a>

- Berninger, V.W., Joshi, R.M. (2016). New Directions in Preservice and Inservice Professional Development for Teaching Students with and Without Specific Learning Disabilities in Middle Childhood and Early Adolescence. In: Schiff R., Joshi R. (eds) *Interventions in Learning Disabilities. Literacy Studies (Perspectives from Cognitive Neurosciences, Linguistics, Psychology and Education)*, vol 13. Springer, Cham. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-3-319-31235-4\_16">https://doi-org.am.e-nformation.ro/10.1007/978-3-319-31235-4\_16</a>
- Brady, A. & Shinohara, Y. (2000). Principles and activities for a transcultural approach to additional language learning. *System*, 28, 305–322.
- Brennan, J., Teichler, U. (2008). The future of higher education and of higher education research. *Higher Education*. 56, 259–264 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10734-008-9124-6">https://doi-org.am.e-nformation.ro/10.1007/s10734-008-9124-6</a>
- Brischetto A., Rinaldi A. (2020). Designing of Inclusive Learning Experiences: Preliminary Outcomes of a Pilot Project Tailored to SLD. In: Di Bucchianico G. (eds) Advances in Design for Inclusion. AHFE 2019. *Advances in Intelligent Systems and Computing*, 954. Springer, Cham. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-3-030-20444-0\_3">https://doi-org.am.e-nformation.ro/10.1007/978-3-030-20444-0\_3</a>
- Butler, D. L. & Schnellert, L. (2015). Success for students with learning disabilities: what does self-regulation have to do with it? In T. Cleary (Ed.), *Self-regulated learning interventions with at-risk youth: enhancing adaptability, performance and well-being.* 89-112. APA Press.
- Cameron, J.J., Gaetz, R., Balchen, S., Stinson, D.A. (2010). Acceptance is in the eye of the beholder: self-esteem and motivated perceptions of acceptance from the opposite sex. *Journal of Personality and Social Psychology*, 99, 513–529.
- Chatzara, K., Karagiannidis, C. & Stamatis, D. (2016). Cognitive support embedded in self-regulated e-learning systems for students with special learning needs. *Education and Information Technologies*. 21, 283–299 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10639-014-9320-1">https://doi-org.am.e-nformation.ro/10.1007/s10639-014-9320-1</a>
- Cline, T. (1998). The assessment of special educational needs for bilingual children. *British Journal of Special Education*, 25, 159–163.
- Coman, C., Ţîru, L.G., Meseşan-Schmitz, L., Stanciu, C., Bularca, M.C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: students' perspective. *Sustainability*, 12 (24): 10367. https://doi.org/10.3390/su122410367
- Cornoldi, C., Di Caprio, R., De Francesco, G.,nToffalini, E. (2019). The discrepancy between verbal and visuoperceptual IQ in children with a specific learning disorder: An analysis of 1624 cases. *Research in Developmental Disabilities*, 87, 64-72. <a href="https://doi.org/10.1016/j.ridd.2019.02.002">https://doi.org/10.1016/j.ridd.2019.02.002</a>
- Covelli V., Mana R., Panizza L., Sarti L., Zugno E. (2019) Higher Education and Students with Disabilities: e-Learning for Inclusion at eCampus University. In: Burgos D. et al. (eds) *Higher Education Learning Methodologies and Technologies Online*. HELMeTO 2019. Communications in Computer and Information Science, vol 1091. Springer, Cham. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-3-030-31284-8">https://doi-org.am.e-nformation.ro/10.1007/978-3-030-31284-8</a> 2
- Dainer, K.B., Klorman, R., Salzman, L.F. et al. (1981). Learning-disordered children's evoked potentials during sustained attention. *Journal of Abnormal Child Psychology*, 9, 79–94 <a href="https://doiorg.am.e-nformation.ro/10.1007/BF00917859">https://doiorg.am.e-nformation.ro/10.1007/BF00917859</a>

- Diaz-Caneiro, E. (2019). Assessing Transnational Higher Education: Positive And Negative Relations Between Institutions. *Procedia Social and Behavioral Sciences*, LX: 127-132 https://doi.org/10.15405/epsbs.2019.04.02.16
- DiFino, S. M. & Lombardino, L. J. (2004). Language Learning Disabilities: The Ultimate Foreign Language Challenge. *Foreign Language Annals*, 37(3), 390–400. doi:10.1111/j.1944-9720.2004.tb02697.x
- Dumitru, Tabacaru, C., (2019). The situation of dyslexic children in Romanian inclusive schools. *The European Proceedings of Social & Behavioural Sciences EpSBS*, Volume LX, 948-954, https://dx.doi.org/10.15405/epsbs.2019.04.02.117
- Esmaili, S.K., Shafaroodi, N., Mehraban, A.H. et al. (2016). Prevalence of Psychiatric Symptoms and Mental Health Services in Students with Specific Learning Disabilities in Tehran, Iran. *International Journal of Mental Health and Addiction*. 14, 438–448 <a href="https://doi-org.am.e-nformation.ro/10.1007/s11469-015-9617-3">https://doi-org.am.e-nformation.ro/10.1007/s11469-015-9617-3</a>
- Fernandes L., Gouveia M.J., Castro Silva J., Peixoto F. (2021). Positive Education': A Professional Learning Programme to Foster Teachers Resilience and Well-Being. In: Mansfield C. (eds) *Cultivating Teacher Resilience*. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-15-5963-17">https://doi.org/10.1007/978-981-15-5963-17</a>
- Gaspard, J. & Yang, CM. (2016). Training needs assessment of health care professionals in a developing country: the example of Saint Lucia. *BMC Medical Education* 16, 112 <a href="https://doiorg.am.e-nformation.ro/10.1186/s12909-016-0638-9">https://doiorg.am.e-nformation.ro/10.1186/s12909-016-0638-9</a>
- Gemou M. & Bekiaris E. (2009). Evaluation Framework towards All Inclusive Mainstream ICT. In: Stephanidis C. (eds) *Universal Access in Human-Computer Interaction. Addressing Diversity. UAHCI* 2009. Lecture Notes in Computer Science, vol 5614. Springer, Berlin, Heidelberg. https://doi-org.am.e-nformation.ro/10.1007/978-3-642-02707-9 54
- Giovazolias, T., Kourkoutas, E., Mitsopoulou, E., Georgiadi, M. (2010). The relationship between perceived school climate and the prevalence of bullying behavior in Greek schools: Implications for preventive inclusive strategies. *Procedia Social and Behavioral Sciences* 5:2208-2215 DOI: 10.1016/j.sbspro.2010.07.437
- Gleason, B., Cherrez, N.J. (2021). Design Thinking Approach to Global Collaboration and Empowered Learning: Virtual Exchange as Innovation in a Teacher Education Course. *Tech Trends*. <a href="https://doi.org/10.1007/s11528-020-00573-6">https://doi.org/10.1007/s11528-020-00573-6</a>
- Goetz, T., Preckel, F., Zeidner, M., Schleyer, E. (2008). Big fish in big ponds: A multilevel analysis of test anxiety and achievement in special gifted classes. *Anxiety, Stress & Coping*, 21:2, 185-198, DOI: 10.1080/10615800701628827
- Hadjikakou, K. & Hartas, D. (2008). Higher education provision for students with disabilities in Cyprus. *Higher Education*. 55, 103–119 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10734-007-9070-8">https://doi-org.am.e-nformation.ro/10.1007/s10734-007-9070-8</a>
- Hall, E.T., Meyer, A., Rose, D.H. (Ed.) (2012). *Universal Design for Learning in the Classroom: Practical Applications*. Guilford Press.

- Hanley, A.W., Palejwala, M.H., Hanley, R.T., Canto, A.I., Garland, E.L. (2015). A failure in mind: dispositional mindfulness and positive reappraisal as predictors of academic self-efficacy following failure. *Personality and Individual Differences*, 86, 332–337.
- Hehir, T., Grindal, T., Freeman, B., Lamoreau, R., Borquaye, Y., Burke, S. (2016). *A summary of the evidence on inclusive education*. Cambridge, MA.
- Hendriksen, J.G.M., Keulers, E.H.H., Feron, F.J.M. et al. (2007). Subtypes of learning disabilities. *European Child & Adolescent Psychiatry*. 16, 517–524 <a href="https://doi-org.am.e-nformation.ro/10.1007/s00787-007-0630-3">https://doi-org.am.e-nformation.ro/10.1007/s00787-007-0630-3</a>
- Howard, B.C., McGee, S., Shia, R., Hong, N.S. (2000). Metacognitive Self-Regulation and Problem-Solving: Expanding the Theory Base through Factor Analysis. *Annual Meeting of the American Educational Research Association*
- Iglesias A., Moreno L., Jiménez J., Revuelta P. (2010) Evaluating the Users' Satisfaction Using Inclusive Initiatives in Two Different Environments: The University and a Research Conference. In: Miesenberger K., Klaus J., Zagler W., Karshmer A. (eds) *Computers Helping People with Special Needs. ICCHP 2010. Lecture Notes in Computer Science*, vol 6179. Springer, Berlin, Heidelberg. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-3-642-14097-6">https://doi-org.am.e-nformation.ro/10.1007/978-3-642-14097-6</a> 95
- Jacko, J. & Hanson, V. (2002). *Universal Access and Inclusion in Design*. UAIS 2, 1–2 <a href="https://doiorg.am.e-nformation.ro/10.1007/s10209-002-0030-x">https://doiorg.am.e-nformation.ro/10.1007/s10209-002-0030-x</a>
- Jones, R.M., Somerville, L.H., Li, J. et al. (2014). Adolescent-specific patterns of behavior and neural activity during social reinforcement learning. *Cognitive, Affective, & Behavioral Neuroscience*. 14, 683–697 <a href="https://doi-org.am.e-nformation.ro/10.3758/s13415-014-0257-z">https://doi-org.am.e-nformation.ro/10.3758/s13415-014-0257-z</a>
- Jones, R.M., Somerville, L.H., Li, J., Ruberry, E.J., Powers, A., Mehta, N., Dyke, J., Casey, B.J. (2014). Adolescent-specific patterns of behavior and neural activity during social reinforcement learning. *Cognitive, affective & behavioral neuroscience*, 14 (2), 683–697. <a href="https://doi.org/10.3758/s13415-014-0257-z">https://doi.org/10.3758/s13415-014-0257-z</a>
- Karpov, A.O. (2019). University 3.0 between globalization and culture. *Procedia Social and Behavioral Sciences*, LX: 106-117. https://doi.org/10.15405/EPSBS.2019.04.02.14
- Katz, L., Brown, F., Roth, R., Beers, S. (2011). Processing speed and working memory performance in those with Both ADHD and a reading disorder compared with those with ADHD alone. *Archives of Clinical Neuropsychology*, 26 (5), 425–433. Oxford University Press.
- Kavale K.A. & Flanagan D.P. (2007). Ability—Achievement Discrepancy, Response to Intervention, and Assessment of Cognitive Abilities/Processes in Specific Learning Disability Identification: Toward a Contemporary Operational Definition. In: Jimerson S.R., Burns M.K., VanDerHeyden A.M. (eds) *Handbook of Response to Intervention*. Springer, Boston, MA. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-0-387-49053-3">https://doi-org.am.e-nformation.ro/10.1007/978-0-387-49053-3</a> 10
- Kinnebrew, J. & Biswas, G. (2011). Self-regulated learning in teachable agent environments. *Journal of e-Learning and Knowledge Society*, 7(2), 19–35.
- Kirk, S.A. (1962). Educating exceptional children, Boston, MA: Houghton Mifflin.

Klassen, R. (2010). Confidence to manage learning: the self-efficacy for self-regulated learning of early adolescents with learning disabilities. *Learning Disability Quarterly*, 33 (1), 1-12

Kohli, A., Malhotra, S., Mohanty, M., Khehra, N., Kaur, M. (2005). Specific learning disabilities in children: Deficits and neuropsychological profile. *International Journal of Rehabilitation Research*. 28, 165–169.

Konicarova, J. (2014). Psychological Principles of Learning Language in Children with ADHD and Dyslexia. *Activitas Nervosa Superior*. 56, 62–68<a href="https://doi-org.am.e-nformation.ro/10.1007/BF03379610">https://doi-org.am.e-nformation.ro/10.1007/BF03379610</a>

Kulkarni, M., Kalantre, S., Upadhye, S. et al. (2001). Approach to learning disability. *The Indian Journal of Pediatrics*. 68, 539–546 https://doi-org.am.e-nformation.ro/10.1007/BF02723250

Kumar, P. & Agrawal, N. (2019). Learning Disabled and Their Education in India. *Human Arenas*. 2, 228–244 <a href="https://doi-org.am.e-nformation.ro/10.1007/s42087-018-0035-5">https://doi-org.am.e-nformation.ro/10.1007/s42087-018-0035-5</a>

Lawani, M., Turgeon, Y., Cote, L., Giguère, A., et al. (2021). User-centered and theory-based design of a professional training program on shared decision-making with older adults living with neurocognitive disorders: a mixed-methods study. *BMC Medical Informatics and Decision Making* 21(1). DOI: 10.1186/s12911-021-01396-y

Layer, G. (2017). Inclusive Teaching and Learning in Higher Education as a route to Excellence. Wolverhampton, UK.

Lerner, J. W., & Johns, B. (2011). Learning disabilities and related mild disabilities: characteristics and directions. In J. W. Lerner, & B. Johns (Eds.), *Learning disabilities and related mild disabilities* (12th ed., pp. 1–35). Wadsworth: Cengage Learning.

Lloyd, G., Stead, J, Cohen, D. (2006). Critical New Perspectives on ADHD. Routledge, New York.

Mansfield, C.M. (Ed.) (2021). *Cultivating Teacher Resilience International Approaches, Applications and Impact*. https://doi.org/10.1007/978-981-15-5963-1

Markaki, A., Antonakis, N., Hicks, C.M. et al. (2007). Translating and validating a Training Needs Assessment tool into Greek. BMC Health Services Research, 7, 65 <a href="https://doi-org.am.e-nformation.ro/10.1186/1472-6963-7-65">https://doi-org.am.e-nformation.ro/10.1186/1472-6963-7-65</a>

Márquez, C. & Melero-Aguilar, N. (2021). What are their thoughts about inclusion? Beliefs of faculty members about inclusive education. *Higher Education* <a href="https://doi-org.am.e-nformation.ro/10.1007/s10734-021-00706-7">https://doi-org.am.e-nformation.ro/10.1007/s10734-021-00706-7</a>

Marzocchi, G. M., Ornaghi, S., Barboglio, S. (2009). What are the causes of the attention deficits observed in children with dyslexia? *Child Neuropsychology*, 15(6), 567–581.

Matteucci, M.C. & Soncini, A. (2021). Self-efficacy and psychological well-being in a sample of Italian university students with and without Specific Learning Disorder. *Research in Developmental Disabilities*. 110. <a href="https://doi.org/10.1016/j.ridd.2021.103858">https://doi.org/10.1016/j.ridd.2021.103858</a>

Miles, M.B., Huberman, A.M., & Saldaña, J. (2014). *Qualitative data analysis* (3th ed.). Sage Publications.

Ministry of Education and Culture, n.d. The Finnish Education System (2020). Retrieved 1.2.2021. https://minedu.fi/en/education-system#Higher%20education

Mouhib, L. (2018). Réussir ses études. Quels parcours? Quels soutiens? Parcours de réussite dans le premier cycle de l'enseignement supérieur - Fédération Wallonie-Bruxelles, 2014-2017, Rapport de recherche, Bruxelles, ARES.

Nation, K., Adams, J.W., Bowyer-Crane, C.A., Snowling, M.J. (1999). Working memory deficits in poor comprehenders reflect underlying language impairments. *Journal of Experimental Child Psychology*, 73, 139-158.

Nelson, J. M., & Harwood, H. (2011). Learning disabilities and anxiety: a meta-analysis. *Journal of Learning Disabilities*, 44 (1), 3–17. <a href="https://doi.org/10.1177/0022219409359939">https://doi.org/10.1177/0022219409359939</a>

Non-discrimination Act, <a href="https://www.finlex.fi/en/laki/kaannokset/2014/en20141325">https://www.finlex.fi/en/laki/kaannokset/2014/en20141325</a>

Panicker, A. & Chelliah, A. (2016). Resilience and stress in children and adolescents with specific learning disability. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 25, 17–23.

Panicker, A., & Chelliah, A. (2016). Resilience and stress in children and adolescents with specific learning disability. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 25, 17–23.

Panshikar A. (2019). Specific Learning Disability: A Hidden Disability. In: Chennat S. (eds) *Disability Inclusion and Inclusive Education*. Springer, Singapore. <a href="https://doi-org.am.e-nformation.ro/10.1007/978-981-15-0524-9">https://doi-org.am.e-nformation.ro/10.1007/978-981-15-0524-9</a> 9

Parrilla Á. (2008) Inclusive Education in Spain: A view from Inside. In: Barton L., Armstrrong F. (eds) *Policy, Experience and Change: Cross-Cultural Reflections on Inclusive Education. Inclusive Education: Cross Cultural Perspectives*, vol 4. Springer, Dordrecht. <a href="https://doiorg.am.e-nformation.ro/10.1007/978-1-4020-5119-7">https://doiorg.am.e-nformation.ro/10.1007/978-1-4020-5119-7</a> 3

Pintrich, R.A. (2004). Conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385–407. Publisher: Springer.

Popovici, D. V., Agheană, V. (2017). Aspecte privind incluziunea tinerilor cu dizabilități în învățământul superior din România: provocări și bune practici. Accesibilitatea tinerilor cu dizabilitati in universitati (orientari teoretice si practice). [Aspects regarding the inclusion of young people with disabilities in higher education in Romania: challenges and good practices. Accessibility of young people with disabilities in universities (theoretical and practical guidelines)]. Editura Pontos, Chișinău.

Rose, D.H. & Strangman, N. (2007). Universal Design for Learning: meeting the challenge of individual learning differences through a neurocognitive perspective. *Universal Access in the Information Society* 5, 381–391 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10209-006-0062-8">https://doi-org.am.e-nformation.ro/10.1007/s10209-006-0062-8</a>

Ryan, J. (2011). Access and participation in higher education of students with disabilities: access to what? *The Australian Educational Researcher*. 38, 73–93 <a href="https://doi-org.am.e-nformation.ro/10.1007/s13384-010-0002-8">https://doi-org.am.e-nformation.ro/10.1007/s13384-010-0002-8</a>

Saffran, J.R. (2018). Statistical learning as a window into developmental disabilities. *Journal of Neurodevelopmental Disorders*. 10, 35 <a href="https://doi-org.am.e-nformation.ro/10.1186/s11689-018-9252-y">https://doi-org.am.e-nformation.ro/10.1186/s11689-018-9252-y</a>

Sandhu, P. (2018). Self- regulated Learning and Well-being in Mainstream Classrooms, Focusing the Lens on Students with Learning Disability. *International Journal of Educational Science and Research* 8 (1): 75-90 DOI: 10.24247/ijesrfeb201811

Savidis, A., Grammenos, D. & Stephanidis, C. (2007). Developing inclusive e-learning and e-entertainment to effectively accommodate learning difficulties. *Universal Access in the Information Society*. 5, 401–419 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10209-006-0059-3">https://doi-org.am.e-nformation.ro/10.1007/s10209-006-0059-3</a>

Shenoy, S. (2016). Efficacy of a Bilingual Screening Tool in L1 Kannada and L2 English to Differentiate Between Language Differences and Disorders in English Language Learners. *Psychological Studies*. 61, 126–136 <a href="https://doi-org.am.e-nformation.ro/10.1007/s12646-016-0369-3">https://doi-org.am.e-nformation.ro/10.1007/s12646-016-0369-3</a>

Svetaz, M.V., Ireland, M., Blum, R. (2000). Adolescents with learning disabilities: risk and protective factors associated with emotional well-being: findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, 27 (5), 340–348. doi:10.1016/s1054-139x(00)00170-1

Tal-Saban, M. & Weintraub, N. (2019). Motor functions of higher education students with dysgraphia. Research in Developmental Disabilities. 94 <a href="https://doi.org/10.1016/j.ridd.2019.103479">https://doi.org/10.1016/j.ridd.2019.103479</a>

The American Psychiatric Association (APA). (2012). Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (5th Ed.)

Torres, G.C., Olmedo, G.N., Yépe, M.A.P., Ron, V.N. (2019). First cycle students' goals orientation and adjustment to university life. *Procedia - Social and Behavioral Sciences*, LX: 610 -617. <a href="https://dx.doi.org/10.15405/epsbs.2019.04.02.76">https://dx.doi.org/10.15405/epsbs.2019.04.02.76</a>

Trow, M. (2000). From Mass Higher Education to Universal Access: The American Advantage. Minerva 37, 303–328 https://doi-org.am.e-nformation.ro/10.1023/A:1004708520977

Universities Act 558/2009. (Amendments up to 644/2016 included). Retrieved 1.2.2021. <a href="https://www.finlex.fi/fi/laki/kaannokset/2009/en20090558.pdf">https://www.finlex.fi/fi/laki/kaannokset/2009/en20090558.pdf</a>

Universities of Applied Sciences Act 932/2014. (Amendments up to 563/2016 included). Finlex. Retrieved 1.2.2021. https://www.finlex.fi/en/laki/kaannokset/2014/en20140932.pdf

van der Oord, S. & Tripp, G. (2020). How to Improve Behavioral Parent and Teacher Training for Children with ADHD: Integrating Empirical Research on Learning and Motivation into Treatment. Clinical Child and Family Psychology Review. 23, 577–604 <a href="https://doi-org.am.e-nformation.ro/10.1007/s10567-020-00327-z">https://doi-org.am.e-nformation.ro/10.1007/s10567-020-00327-z</a>

van Kessel, R., Roman-Urrestarazu, A., Ruigrok, A. et al. (2019). Autism and family involvement in the right to education in the EU: policy mapping in the Netherlands, Belgium and Germany. *Molecular Autism* 10, 43 <a href="https://doi-org.am.e-nformation.ro/10.1186/s13229-019-0297-x">https://doi-org.am.e-nformation.ro/10.1186/s13229-019-0297-x</a>

Vanhalst, J., Luyckx, K., Scholte, R.H.J. et al. (2013). Low Self-Esteem as a Risk Factor for Loneliness in Adolescence: Perceived - but not Actual - Social Acceptance as an Underlying Mechanism. *Journal of Abnormal Child Psychology*. 41, 1067–1081 <a href="https://doi.org/10.1007/s10802-013-9751-y">https://doi.org/10.1007/s10802-013-9751-y</a>

Wang, LC., Li, X. & Chung, K.K.H. (2021). Relationships between test anxiety and metacognition in Chinese young adults with and without specific learning disabilities. *Annals of Dyslexia*. 71, 103–126 <a href="https://doi-org.am.e-nformation.ro/10.1007/s11881-021-00218-0">https://doi-org.am.e-nformation.ro/10.1007/s11881-021-00218-0</a>

Weegar, K., Romano, E. (2019). Child Maltreatment Knowledge and Responses Among Teachers: A Training Needs Assessment. *School Mental Health* 11, 741–753 <a href="https://doi-org.am.e-nformation.ro/10.1007/s12310-019-09317-1">https://doi-org.am.e-nformation.ro/10.1007/s12310-019-09317-1</a>

Wray, M. (2019). Policy flaws in the UK HE system of support for disabled students. Bristol, UK.

Yousefi, F., Talib, M. A., Mansor, M. B., Juhari, R. B., Redzuan, M. (2010). The Relationship between Test-Anxiety and Academic Achievement among Iranian Adolescents. *Asian Social Science*, 6 (5). doi:10.5539/ass.v6n5p100