

TEACHER ATTITUDES

Pre-service teachers' attitudes towards inclusion in Finland

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The attitudes towards inclusion and the terms used related to special needs by pre-service teachers in three Finnish universities were studied. Inclusion is the main educational policy in Finland, and special solutions are avoided when possible. With a questionnaire and a brief survey, data from 488 pre-service teachers (PSTs) were collected and analysed qualitatively and quantitatively. Results indicated that their attitudes towards inclusion were quite negative. Most of the positive attitudes, which were below the mean of the scale, were held by PSTs with special education as their major or as part of their studies, along with early education PSTs. The terms used for special needs were partly traditional, following the medical model of disability, but many students also referred to the structure of the support. The reasons for the negative attitudes and changes in the traditional names of special needs are also discussed.

Key words: inclusion, disability models, pre-service teachers, attitudes, Finland.

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DOI: 10.1111/1467-9604.12415

Introduction

Inclusive education can be defined as a good education for all pupils (European Agency for Special Needs and Inclusive Education, 2014). Teachers' attitudes towards inclusion are a significant factor in its success (Goddard and Evans, 2018; AlMahdi and Bukamal, 2019). This is especially true for pre-service teachers, who are responsible for implementing successful inclusive education in the future (Weber and Greiner, 2019; Byra and Domagała-Zyśk, 2021). Attitudes may either overcome prejudices or contribute to maintaining them (Byra and Domagała-Zyśk, 2021). However, it can be challenging to make inclusion succeed in a school environment where teachers have negative attitudes towards it (Lauchlan and Greig, 2015; Alnahdi *et al.*, 2019).

Nevertheless, during teacher education, it is possible to influence future teachers' attitudes by providing opportunities to meet a variety of students and perform teaching practices in an inclusive school during pre-service education (AlMahdi and Bukamal, 2019; Arvelo-Rosales *et al.*, 2021). In the current article, we examine pre-service teachers' attitudes towards inclusion in general and the possibility of including pupils with different special educational needs in particular. We also comment on and study their perceptions of special educational needs in Finland. In this article, we use the term 'pre-service teachers' (PSTs) to refer to students currently enrolled in a teaching degree programme at a Finnish university.

Inclusion is an accepted principle for the development of early childhood education (ECE) and school education in Finland (Finnish National Board of Education, 2016, 2018). 'Inclusion' can be understood as the removal of barriers to learning and involvement (Finnish Ministry of Education, 2007). Nevertheless, definitions of inclusion vary and are influenced by the different cultural customs and practices in each country (Haug, 2010). Apart from influencing the definitions, such cultural differences affect individuals' attitudes towards inclusion (Yada, 2020). Inclusion is a slow and many-sided process that is never fully concluded (Hausstätter, 2014). In this study, we define 'inclusion' following Roger Slee (2001, p. 116):

I would argue that inclusive education is not about special educational needs, it is about all students. It asks direct questions: Who's in? and Who's out? The answers find their sharpest definition along lines of class, 'race', ethnicity and language, disability, gender and sexuality and geographic location.

For some teachers, some children are easier to include than others, and one factor that influences teachers' attitudes towards inclusion is the type and severity of disability (Avramidis and Norwich, 2002; Byra and Domagała-Zyśk, 2021). Teachers are more willing to accept students with mild disabilities or physical and sensory impairments than those with more complex disabilities (Avramidis and Norwich, 2002). According to Moberg *et al.* (2020), in the case of more severe learning needs and behavioural challenges, teachers hold negative attitudes regarding the implementation of inclusion. Comparing Finnish and Japanese teachers' attitudes towards inclusion (Moberg *et al.*, 2020), the former were more worried about teachers' efficacy when implementing inclusion, especially involving children with intellectual impairment and emotional and behavioural problems.

In many Finnish studies, pupils with social, emotional and behavioural difficulties, intellectual impairments and autistic disorders face negative attitudes from teachers (Jahnukainen and Korhonen, 2003; Malinen, 2013; Viljamaa and Takala, 2017). The general attitudes often consist of stereotypical perceptions of some groups of pupils. Interestingly, teachers' personal experiences working with pupils in need of socio-emotional support were more positive than their attitudes towards inclusion in general (Hirvensalo, 2018). Saloviita (2020) studied Finnish teachers' ($N = 4567$) attitudes towards inclusion and noted their link to teacher categories. Furthermore, special educators have more positive attitudes than class teachers (primary school teachers) and subject teachers. Most of the class and subject teachers believed that pupils with special educational needs (SEN pupils) learn best in special settings (Saloviita, 2020).

Pre-service teachers' attitudes towards inclusion

Pre-service teachers' attitudes towards inclusion of SEN pupils have been studied since the Salamanca statement (United Nations, 1994; Hernández-Torrano *et al.*, 2020). Attitudes are individual evaluations of the world and are subjectively true (Bohndick *et al.*, 2022). Attitudes also refer to the personal feelings, beliefs and reactions of an individual towards an event, phenomenon, object or person. They are learnt and relatively stable but can be modified (Temitayo, 2012).

Pre-service teachers' (PSTs) attitudes towards inclusion have been proven to be positive (Goddard and Evans, 2018; AlMahdi and Bukamal, 2019; Alnahdi *et al.*, 2019; Rodríguez-Fuentes and Caurcel Cara, 2020). However, in spite of such an overall positive outlook, specific attitudes towards groups of pupils remained negative,

particularly towards those with profound and multiple learning difficulties (Al Shoura and Aznan, 2020; Byra and Domagała-Zyśk, 2021) and pupils who require individualised education plans (Rodríguez-Fuentes and Caurcel Cara, 2020). Negative attitudes were also expressed towards pupils who showed aggressive behaviour or required communicative technologies in their studies (AlMahdi and Bukamal, 2019). In comparison, attitudes were more positive towards pupils with language difficulties or pupils with a lack of attentiveness (AlMahdi and Bukamal, 2019) and those with physical or sensory disabilities (Byra and Domagała-Zyśk, 2021).

Special education PSTs typically have more positive attitudes towards inclusion than class or subject PSTs (Miesera *et al.*, 2019; Al Shoura and Aznan, 2020). Thus, PSTs' experiences influence their attitudes (Goddard and Evans, 2018; Al Shoura and Aznan, 2020). Furthermore, PSTs who had been in contact with SEN pupils had more positive attitudes than those with no experience with such pupils (Rodríguez-Fuentes and Caurcel Cara, 2020; Tuncay and Kizilaslan, 2021).

These attitudes can, nevertheless, be affected already in teacher education. In Finnish Universities, all PSTs must study at least some credits worth of special education during their teacher training. Nevertheless, this is not the case in every country. In many countries, general education teachers have to resort to various training programmes to compensate for the special education knowledge they lack (Crispel and Kasperski, 2021). In a project by the European Agency for Development in Special Needs Education (2012), the profile of an inclusive teacher was developed. It consists of four fundamental competencies: valuing student diversity, supporting all learners, working with others (collaboration) and personal professional development (Watkins and Donnelly, 2014). These competencies need to and can be trained during teacher studies, as was done in a Spanish study (Arvelo-Rosales *et al.*, 2021).

Special educational needs in Finland

The terminologies used in special education can be understood as a reflection of prevailing attitudes towards disability (Demetriou, 2020). In Finnish special education at the universities, one book entitled *Special care and special education for children in Finland* has served as compulsory reading material for decades. The first edition was published in 1954 (editor Raitasuo) and the last was published in 2012 (editor Jahnukainen). It is rewritten once or twice every decade. Browsing through these past and current editions clearly indicates that the terms used to refer to 'special educational needs' have changed. In the 1954 edition, medical issues (e.g. epilepsy)

were described using old-fashioned and unpleasant terms. By the 21st century, medical perspectives and diagnoses (e.g. spina bifida, diabetes and multiple sclerosis) have been left out of the book, and newer pedagogical and social perspectives have replaced them. One example of the change in these names (categories) was the use of *Children showing disturbed behaviour* as a chapter title in the 1954 edition, which was later changed to *Socioemotional competence and experiencing participation* in the 2012 edition. Henceforth, new names and topical issues, such as immigrants and various minorities, as well as the terms ‘gifted’ and ‘talented’, appeared in the book chapters. Furthermore, such issues as supporting parents and children in divorce situations, multi-professional collaboration, collaboration between professionals and families or problematisation of childhood appeared in the latest 2012 edition.

The changes in these terms also appeared in statistical data. The Official Statistics of Finland (OSF) gathers information from schools about pupils who receive support. Until 2010, respondents were asked about the rationale behind the need for special education in schools, and the prevailing classification included six categories. In part-time special education, which refers to temporary and short-term educational support (see also Takala *et al.*, 2009), the most common reason for support was reading and writing difficulties, followed by mathematical and speech/linguistic challenges, challenges in learning foreign languages, socio-emotional challenges and others (OSF, 2010a). In comparison, the reasons for full-time special education were different, and the five most common categories – in order of frequency – were as follows: learning difficulties caused by impaired linguistic development, slightly delayed development, cerebral dysfunction, physical disability and emotional disturbance or social maladjustment (OSF, 2010b).

By 2010, the support model in Finland had changed to the so-called ‘three-step support’ system consisting of general, intensified and special support, the new form of support being intensified support, resembling the three-tier response to intervention (RTI) system used in the USA (Björn *et al.*, 2016). During the initial stage of this model’s implementation, the need for special solutions at the early education level and school decreased (OSF, 2018). Hence, since 2011, the needs of pupils have been registered based simply on the form of support provided for these.

Wording diverse educational needs

Words carry messages and are, therefore, extremely important. Labelling with a negative phrase or with a phrase referring to some learning difficulty can be self-fulfilling,

and teachers might gain negative ideas based simply on the label used, without even meeting the children involved (see also Gibbs *et al.*, 2020). However, knowledge in relation to the label can also help others perceive the behaviours more positively, as in the case of, for example, autism spectrum disorder (Nah and Tan, 2021). Thus, a label can be either helpful or unhelpful (Lauchlan and Boyle, 2007).

Names, categories or labels of special educational needs vary from one country to another and are based on the acts and laws of each country (OECD, 2012). Some names are negative and can stigmatise, while some are comparatively more neutral. Language has the power to define policies and practices, while labels carry meanings as well as attitudes (Demetriou, 2020). The reason why defining categories is needed is the same in most countries, that is, to receive services (e.g. educational support) at school (Nilholm, 2011; Demetriou, 2020). A common way to define the extra needs in education is to call them ‘special or individual educational needs’ (see also Vehmas, 2010).

Depending on the time period, the reason for categorising special educational needs is defined based on the individual, the environment or somewhere in between. Various models of disability, such as medical, social and social interactionist models, have influenced the provision of special education services (Nilholm, 2011; Dudley-Marling and Burns, 2014; Dally *et al.*, 2019). The primary motivating hypothesis of the *Convention on the Rights of Persons with Disabilities* (CRPD; see United Nations, 2006) is the social model of disability. This model recognises human diversity and aims to identify and remove barriers in schools and in the entire educational system to create equal opportunities for learning to everyone.

The medical model, which posits that disability is caused by an impairment in an individual’s biology, has brought a great deal of medical terminologies into the field of special education, such as ‘symptom’, ‘diagnosis’, ‘treatment’ and ‘cure’, many of which are still in use today (Rees, 2017). This view, called the ‘deficit perspective’, has dominated the field of special education and mainly promotes the notion that there is something wrong in the individual that needs to be fixed, healed and/or compensated for. Later on, with the change from the medical to a social model (i.e. a social-constructivist perspective), the focus shifted from disability support to inclusion support. As a result, this transition has also changed the work of special and general education teachers (Dudley-Marling and Burns, 2014; Dally *et al.*, 2019).

All perspectives have faced challenges and criticisms (Nilholm, 2011). Hedge and MacKenzie (2012) discussed Nussbaums’ capability approach and highlighted

the essential roles of equality, respect and dignity in aiming for inclusion progress. Such beliefs have led to positive psychology and positive pedagogy that dominated the 21st century: instead of focusing on what is not functioning or what is weak, the focus should be on the strengths of an individual (Seligman and Csikszentmihályi, 2000; Seligman, 2011; Vuorinen *et al.*, 2019).

In this study, two issues are combined: attitudes towards inclusion and names used for special education and special educational needs. Our aim is to see how today's students call pupils and their educational needs, pupils whom they encounter in inclusive settings in their future work. We claim that these names reflect attitudes (also Lister *et al.*, 2020).

Aim, context and methods

The aims of this study are to look into the attitudes of PSTs towards inclusion and to examine how they view special education, inclusively or in some other ways. The research questions are as follows:

1. What are the attitudes of pre-service teachers towards inclusion?
2. What kind of learning difficulties do they prefer to be included?
3. What kind of phrases do pre-service teachers use to label pupils with special educational needs?

To gather data addressing the first two research questions, an electronic questionnaire was delivered to all PSTs in three Finnish universities (Universities in Oulu, Turku and Helsinki) in spring 2019 in a project financed by the Finnish Ministry of Education and Culture. Their e-mail addresses were obtained from the institutions, and two reminders were sent to the participants within 6 weeks. To maintain privacy, the respondents stayed anonymous, and only the names of the institutes were identified. For this study, only two closed questions related to inclusion were used. In the questionnaire, 'inclusion' is defined as the right of every child to study at a local school and receive sufficient support from such an institution. In the questionnaires, two questions were included in addition to the respondents' demographic information (area of studies).

The first question asked about attitudes towards inclusion, and the answers were provided using a Likert-type scale ranging from 1 to 5 (1 = 'I am totally against inclusion', 5 = 'I totally support inclusion'). The other question, which was also

answered using a similar Likert scale (1 = ‘very negative attitude’, 5 = ‘very positive attitude’), asked the respondents to quantify their willingness to include pupils with diverse learning difficulties. The following difficulties were listed: mild learning difficulties, mild and severe intellectual impairment, cerebral palsy (CP), hearing or visual impairment, attention deficit hyperactive disorder (ADHD) and developmental language disorder. The exact questions were as follows: ‘What is your general attitude towards inclusion?’ and ‘What is your attitude towards inclusion of pupils who have been diagnosed or otherwise recognised to have following special educational needs?’ The PSTs were grouped into four categories: early education, class, subject and special PSTs.

Meanwhile, the data for the third research question were gathered at the beginning of the first compulsory lecture about special education for all students at the Faculty of Education in one Finnish university. At that point, the students were asked to write what and for whom special education is; they were also asked to answer an additional question: ‘What kind of needs should be covered by special education?’ They were given 15 minutes to respond. They were also asked to provide their demographic information, namely gender, age, field of studies and whether they had previous work experience as a regular teacher or as a special teacher. As no personal information was collected in this study, no ethical evaluation was needed. The permission for the study was received from the education dean of the faculty.

Context and participants

In Finland, teacher education requires a master’s degree (300 credits), except for ECE teachers, where a bachelor’s degree (180 credits) is required. The universities have special education as a compulsory subject in their curricula for all PSTs, with the number of units varying from 1 to 6 credits. For students who want to become special education teachers, the major subject is Special Education. However, all teachers can choose special education as a minor subject (for 25 credits) and also qualify as special education teachers by completing an additional 60 credits of special education studies after their teacher training (National Study info, 2021). Universities that offer teacher education also have teacher training schools. Usually, PSTs have three to five practise periods during their studies, some of which can be done in teacher training schools. Early childhood PSTs practice in local ECE centres.

The questionnaire was responded to by a total of 368 PSTs, including ECE, class, subject and special PSTs. This makes the response rate 30%. The

respondents were categorised so that they were all counted together as students studying special education if their studies had special education as a major or a minor subject. The mean age of the students was 28 years (ranging from 19 to 58 years).

The text regarding special educational needs was written by 120 PSTs, including 42 ECE, 52 classes and 10 special PSTs as well as 16 students studying education as a major but who were not studying for a teaching degree. The response rate was almost 100, with those attending the lecture. The length of the handwritten text varied from two rows to one page. None of them had worked as a special teacher. The mean age of the students was 22.7 years (ranging from 19 to 38 years).

Methods

First, the quantitative data collected from the questionnaire were analysed using means and standard deviations (SD). One-way variance analysis (ANOVA) and post hoc tests were conducted to study the effect of education on the respondents' attitudes. Any differences and their significance between the various PST groups were compared.

Next, the data from the text written in lectures were analysed using content analysis (Schreier, 2012). We studied only the phrases and definitions that the PSTs used to refer to special educational needs. The gathered data were analysed by looking for phrases or labels used in the text. Similar terms, such as 'learning difficulty', 'difficulties in learning' and 'learning disorder', were then summarised with one phrase.

Results

Attitudes towards inclusion

After applying the categorisation to the four respondent groups with the questionnaire data, the obtained frequencies as well as the means and standard deviations in attitudes towards inclusion are shown in [Table 1](#). Results revealed that having special education as part of their studies resulted in more positive attitudes towards inclusion among PSTs. Nevertheless, no mean reached even the midpoint of the scale; hence, overall, the attitudes were not very positive. When looking at

the respondents' ages, those who were studying special education were the oldest (mean age 33.4 years, SD 10.7); however, age was not a statistically significant factor.

Upon comparing the attitudes towards inclusion of PSTs in various categories, the results revealed a statistically significant difference among groups, as determined by one-way ANOVA ($F(3,364) = 8.433, p = 0.000$). Those with special education in their studies had the most positive attitudes towards inclusion compared to other respondents. Furthermore, ECE PSTs also had quite a positive outlook regarding inclusion.

Given that the average age of the pre-service special teachers was considerably higher than the average age of the other groups, we also performed an ANOVA using age as a covariate. However, this produced practically the same results as the simple one-way analysis without age. Pairwise comparison with Gabriel's post hoc test indicated that the differences in attitudes appeared between class and special ($p < 0.000$) as well as subject and special education ($p < 0.001$) PSTs. Furthermore, there was an almost significant difference between pre-service ECE and class teachers ($p = 0.031$).

Inclusion of various learning difficulties

A total of 10 groups of learning difficulties were listed in the questionnaire. The mean of attitudes towards any group, except towards pupils with severe intellectual impairment, was above the mean on the Likert scale in [Table 2](#), in which no PST groups were studied separately. Thus, the respondents' attitudes towards the inclusion of most pupils with learning difficulties were more positive than their attitudes towards inclusion in general, further confirming Hirvensalo's (2018) findings.

Table 1. The mean of attitudes towards inclusion of various teacher groups

<i>Pre-service teacher groups</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>
Class teacher students	125	2.25	0.96
Subject teacher students	98	2.34	0.99
ECE students	54	2.63	0.95
Special education students	87	2.97	1.01

Note: 1 = negative, 5 = most positive; ECE = early childhood education.

There was some degree of variety among the attitudes of different PST groups as shown in Table 3. PSTs who studied to become special teachers or who had special education as one subject had the most positive attitudes towards all listed learning difficulties, except towards pupils with severe intellectual impairment, where early education PSTs had a slightly more positive attitude. All the PSTs had the most negative attitude towards pupils with severe intellectual impairment. According to all PST groups, the most easily included pupils were those with mild challenges in learning, those who had challenges in language development and those with a hearing or visual impairment.

The differences in attitudes among pre-service teacher groups were significant with regard to severe intellectual impairment, CP, hearing and visual impairment, ADHD/ADD and challenges in language development (see Table 4). Mild learning disability was equally accepted by all PST groups and mild intellectual impairment almost equally, with no significant difference between PST groups. Special education PSTs consistently had the most positive attitudes towards inclusion compared with other groups. Nevertheless, early education PSTs had almost as positive attitudes as special PSTs (see Table 3). The questionnaire about learning difficulties consisted of nine items and the value for Cronbach's Alpha was $\alpha = 0.89$.

Table 2. Attitudes of all pre-service teachers towards various disabilities

<i>Learning difficulties</i>	<i>N</i>	<i>Min-max</i>	<i>Mean</i>	<i>SD</i>
Severe intellectual impairment	371	1-5	2.24	1.12
Autism spectrum signs	371	1-5	3.13	1.10
CP	371	1-5	3.15	1.25
ADHD/ADD	371	1-5	3.33	1.10
Visual impairment	371	1-5	3.54	1.13
Developmental language disorder	371	1-5	3.62	1.05
Hearing impairment	371	1-5	3.65	1.14
Mild intellectual impairment	371	1-5	3.65	1.06
Mild learning disability	371	1-5	4.35	0.79

Note: The pre-service teachers included ECE, class, subject and special PSTs; 1 = most negative and 5 = most positive.

Table 3. Means and standard deviation of attitudes towards inclusion of pupils with various learning disabilities

	<i>Special PST</i>	<i>ECE PST</i>	<i>Class PST</i>	<i>Subject PST</i>
<i>Learning difficulties</i>	<i>MISD</i>	<i>MISD</i>	<i>MISD</i>	<i>MISD</i>
Severe II	2.55/1.17	2.57/1.13	1.95/1.02	2.08/1.12
Autism spectrum	3.45/0.94	2.24/1.10	3.02/1.15	2.99/1.09
Cerebral palsy	3.93/1.14	3.28/1.123	2.81/1.24	3.01/1.16
ADHD/ADD	3.84/0.93	3.34/1.18	3.31/1.10	3.05/1.05
Visual impairment	4.17/0.92	3.78/1.04	3.25/1.13	3.33/1.17
Language development	4.14/0.84	3.83/1.04	3.50/1.04	3.31/1.06
Hearing impairment	4.17/0.92	3.97/1.02	3.34/1.17	3.43/1.18
Mild II	3.97/0.99	3.82/1.00	3.50/1.11	3.50/1.03
Mild learning disability	4.47/0.73	4.41/0.71	4.29/0.87	4.35/0.79

Note: 1 = most negative, 5 = most positive.

Abbreviations: PST, pre-service teacher; ECE, early childhood education; II, intellectual impairment.

Terms used to refer to special educational needs

The special educational needs named by 120 students can be classified into 12 categories (see [Figure 1](#)), with more than five mentions in each. Those with less than five mentions were excluded. The most common phrase used was ‘behavioural problems or disorders’, in which ADHD and ADD were now listed. The second was ‘learning disability or difficulty in general’, which was referred to with various names, such as ‘challenges in learning’ or ‘learning disorder’. The third was something that referred to the new legislation in Finland; while students mentioned the need for special or intensified support, some mentioned even general support. The fourth category had similarities with the third one but was more unspecified. This included ideas about special education as something given to anyone in need of support, to those who cannot cope in studies without support or to those who need individual support for any reason.

Looking separately at the respondents’ replies, we found that the top two categories among the ECE group were learning difficulties and behavioural challenges.

Table 4. Significance of the differences between pre-service teacher groups (class, subject, special and early education pre-service teachers)

<i>Learning difficulties</i>	<i>Special and class PST</i>	<i>Special and ECE PST; ECE and subject PST</i>	<i>ECE and class PST</i>	<i>Subject and special PST; Subject and class PST</i>
Severe II	Special and class PST 0.000	–	ECE and Class PST 0.001	Subject and Class PST 0.015
Autism spectrum	Special and class PST 0.047	–	–	Subject and Special PST 0.037
Cerebral palsy	Special and Class PST 0.000	Special and ECE PST 0.008	ECE and Class PST 0.031	Subject and Special PST 0.000
ADHD/ADD	Special and Class PST 0.006	Special and ECE PST 0.031	–	Subject and Special PST 0.000
Visual impairment	Special and Class PST 0.000	ECE and subject PST 0.034	ECE and class PST 0.004	Subject and special PST 0.000
Language development	Special and Class PST 0.000	–	ECE and Class PST 0.005	Subject and Special PST 0.000
Hearing impairment	Special and Class PST 0.000	ECE and subject PST 0.005	ECE and Class PST 0.003	Subject and Special PST 0.001

Abbreviations: PST, pre-service teacher; ECE, early childhood education.

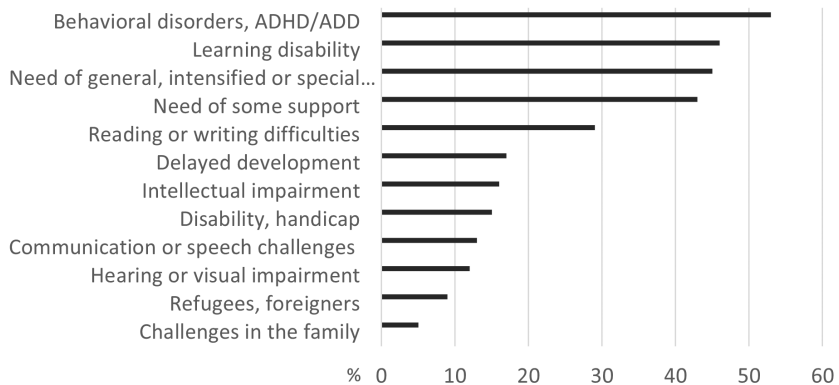


Figure 1. The percentages of the terms used to refer to special needs from 120 pre-service teachers

For example, for those suffering from learning problems ... problems can be connected to reading, writing, seeing, mobility restrictions, language barriers, and illnesses (like depression). (Early education student 18)

Pupils can have problems for example in behaviour or in communication. (Early education student 40)

For the class teacher group, some form of support, such as special or intensified support, was most often used.

Special education is for those who need special support or if there are problems in learning some subjects. (Class teacher student 84)

Special education is for pupils who are intellectually impaired or have some learning difficulty. These pupils need special support, which is difficult to give in a 'normal' class. (Class teacher student 67)

For the special education student group, unnamed support as well as intellectual impairment were named. For those who were studying general education, but not aiming to become teachers, learning difficulties and some form of unnamed support were a common expression. Some examples can be found below.

Special education is for those who need support in studying, for example, pupils with autism spectrum, dyslexia, difficulties in math, with intellectual

impairment or some other issue that makes normal learning difficult. (Special education student 116)

Special education is for those for whom teaching arrangements planned for the mainstream do not fit. (Special education student 58)

Isolated terms with less than five mentions received labels such as ‘hearing and visual impairment’, which were the first of such classical categories in the past. Interestingly, some new categories, such as ‘challenges in family’, also received some mentions.

Special education is for those people who need help/support at school and/or at home. (Class teacher student 103)

Discussion

The inclusion of pupils with special educational needs was seen most positively by PSTs with special education as part of their studies and by ECE PSTs. Nevertheless, none of the groups had a clearly positive attitude overall, with the mean below 3 on a 5-point scale (5 being the most positive choice). This finding has also been found elsewhere. For students who are more familiar with diversity, it seems easier to have a positive outlook on inclusion than for those who are not so familiar with special issues (see also Miesera *et al.*, 2019; Al Shoura and Aznan, 2020). The positive attitudes of special education PSTs have been identified in the literature (Saloviita, 2020), but not those of ECE PSTs. Yu and Park (2020) studied attitudes towards inclusion and learning difficulties among 90 ECE PSTs. They found that their attitudes were positive, but they had concerns about working with pupils with the most severe disabilities or those with challenging behaviour. Overall positive attitudes towards inclusion have also been found among Swedish pre-service early educators (Uusimäki *et al.*, 2020).

When creating inclusive education from teacher education, it seems necessary to have special education as part of the studies and to create opportunities to meet pupils with diverse support needs, for example, during teaching practice. Finland’s teacher training schools – where PSTs practice – seldom have students with severe intellectual impairment and only a few pupils with other disabilities (Finnish National Agency, 2020). However, ECE settings have more diversity than regular schools, special groups are seldom created and all children are lumped into the same

group (Pihlaja and Neitola, 2017; Viljamaa and Takala, 2017). This partly explains the positive attitudes towards inclusion among ECE PSTs. Nevertheless, it can be a possibility to use the four core fundamental competencies of an inclusive teacher (Watkins and Donnelly, 2014) as a framework or starting point in teacher education.

When looking at various special educational needs, the most positive attitudes from all respondents were towards pupils with mild learning disabilities, mild intellectual impairment, challenges in language development and hearing or visual impairment. This is in line with previous studies (e.g. AlMahdi and Bukamal, 2019; Byra and Domagała-Zyśk, 2021). Pupils with severe intellectual impairment or those with signs of autism spectrum received the most negative attitudes. The inclusion of pupils with severe intellectual impairment has also been considered a challenge in recent studies (e.g. Byra and Domagała-Zyśk, 2021). The effect of the degree of disability on prevailing attitudes towards inclusion has also been clearly identified by Lübke *et al.* (2019). Nevertheless, with enough resources and using co-teaching, for example, inclusion of severely disabled pupils can succeed (Louhela, 2012; Saloviita and Consegnati, 2019). Hence, it can be concluded that both the type and severity of special educational needs and previous knowledge and experience with diversity have an impact on attitudes towards inclusion.

The division of support into three parts (general, intensified and special) is already commonly known. In addition to using those forms of support, the pupils in need of special education were called as *‘those who need some support to succeed at school, to get schoolwork done’*. At the same time, environmental elements, such as family background or refugee status, were also considered as reasons for special education. The line between special education and other services, such as social or psychological consultation, can also be a bit blurred.

The classical reading and writing challenges as well as delayed development, intellectual impairment or some other form of disability (e.g. visual or hearing impairment) were all mentioned. Hints of the medical model remained, but instead of focusing on illnesses or disabilities, the need for some kind of support was seen as the main reason for special education. The labels for special educational needs used by PSTs were in line with the latest version of the grand old book (Jahnukainen, 2012) in Finland.

The labels used for special educational needs are changing, and the paradigm is moving towards the socio-constructivist perspective (Dudley-Marling and Burns, 2014). According to our respondents, the difficulty in learning cannot just

be attributed to the individual but may also be due to family circumstances or other environmental reasons. Finally, special education was seen as something everyone may occasionally need for various reasons, and according to many respondents, some of this support could (should) be given in segregated settings.

This study does have its limitations. Regarding the data, we only asked the age and the area of study as a background variable in the questionnaire data. Furthermore, the written data gathered from the lecture were random, and the time limit (15 minutes) may have been too short for some respondents. Moreover, a large group often labelled as ‘behavioural challenge’ was missing from our list, as we thought it was included in the group called ‘ADHD’. However, the respondents might have thought differently. Nevertheless, several previous studies have confirmed our results regarding PSTs’ attitudes (Al Shoura and Aznan, 2020; Byra and Domagała-Zyśk, 2021); hence, our results remain trustworthy and reliable.

To conclude, a general education workforce equipped with the requisite skills, knowledge, attitudes and efficacy to support pupils with disabilities is needed. To achieve this, all PSTs should get familiar with inclusive education and its core values, and as such understand the principles of equity and equality included in the CRPD. It is also important for teachers to gain disability-related knowledge and skills as well as strategies to work in inclusive settings (Majoko, 2017; Dally *et al.*, 2019; Tamtik and Guenter, 2019).

Furthermore, to promote inclusive education, the education of PSTs must integrate issues related to special education. Pre-service teachers, as well as teacher educators, must be familiar with diverse pupils, understand that all pupils have the right to be included (Slee, 2001) and that providing support is quite common and the responsibility of all teachers.

Acknowledgement

This work was supported by the Finnish Ministry of Education under Grant *Right to learn – Skills to teach* 377867, OKM/38/592/2018.

Conflict of interest

There are no potential competing interests to declare.

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