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EFL Teacher Preparedness to Include Learners with Dyslexia: Israeli Context (ICFSLA 2023)

Abstract

The aim of this study was to investigate Israeli English as a foreign language (EFL) teachers' perceived preparedness to include learners with dyslexia in mainstream classrooms (TEPID) and to verify whether there were cross-country differences in this respect. The study examined the effect of demographic variables on Israeli EFL teachers' TEPID and identified their professional development needs around inclusive teaching. Principal components analysis of the TEPID scale led to a two-factor structure, that is, knowledge about dyslexia and self-efficacy in implementing inclusive instructional practices with dyslexic EFL learners (F1), and stance towards inclusion (F2). Statistically significant effects were found for training, highest level of education, years and type of teaching experience with dyslexic learners, and type of certification in relation to F1, yet, only type of teaching experience with dyslexic EFL learners (direct contact and personal involvement in teaching) impacted teacher stance towards inclusion (F2). Additionally, Israeli teachers differed significantly from Polish and Cypriot teachers on both factors of the TEPID, but not from Greek teachers. Moreover, both Greek and Israeli teachers evaluated their knowledge and skills (F1) as well as stance towards inclusion (F2) higher than Polish and Cypriot teachers. Teachers stressed the need for practical information and training about how to teach students with dyslexia. Implications regarding content of teacher training are discussed.

Keywords: teacher preparedness, dyslexia, foreign language

English is the most widely taught additional language in the world today. It is a major language of commerce, social interaction, and academic advancement. In many countries it is also the first foreign language studied (EACEA/Eurydice, 2012). In Israel, as in many European countries, English as a foreign language (EFL) learning begins in primary school where lessons are given by teachers who are not necessarily proficient in English or trained specifically to teach EFL (Enever, 2014; Wilden & Porsch, 2017). Moreover, academic and pedagogical training in EFL instruction usually focuses more on later primary school and secondary school and less on earlier primary school years (Fuchs et al., 2019) leading to a situation where EFL teachers lack necessary knowledge and skills to teach the foundations of English literacy (Vaisman & Kahn-Horwitz, 2019; Wong & Russak, 2020). This situation is problematic as academic achievement of children is negatively affected when their teachers lack content knowledge (Zeng, 2023). In the case of EFL, the problem is more acute, because due to the inherent complexities of the orthography, teaching reading in English is "rocket science" (Moats, 2020), so that successful literacy acquisition requires that teachers possess explicit linguistic and pedagogical knowledge.

As in many countries, the Israeli education system has mandated an inclusion policy for children with special educational needs (SEN) requiring their inclusion in regular educational settings whenever possible. Thus, in any given regular education class there may be between 10–16% children with SEN (Shaked, 2020). While legislation mandates inclusion of children with SEN in the regular classroom, there is no legislation requiring all teachers to receive specific training in accommodating the needs of these pupils, nor is their budgeted time or specific funding for training courses (Russak, 2016). This leads to a situation where children with SEN are included in the regular education and EFL, and taught by teachers who may not necessarily have the prerequisite knowledge or tools to appropriately teach these children.

In this study, we were interested in examining the impact of different demographic variables on teacher perceived preparedness to include pupils with dyslexia in the regular EFL class in Israel. We were also interested in understanding teachers' professional training needs regarding teaching EFL to pupils with dyslexia. Finally, we wanted to compare teacher perceived preparedness to include pupils with dyslexia in the regular EFL class across four countries (Cyprus, Poland, Greece, and Israel).

Literature Review

Inclusion of Students with Dyslexia in EFL Mainstream Classes in Israel

English is the first foreign language that all pupils must study from the third grade on, although recently the Ministry of Education has begun to introduce English in first grade. In the early elementary school years, the emphasis is on beginning literacy skills including oral language and letter-sound knowledge. However, by the fifth-grade pupils are expected to read texts and the emphasis shifts to building vocabulary and comprehension skills. This focus persists through secondary school as well. Little if any attention is given to explicit reading and spelling instruction (Vaisman & Kahn-Horwitz, 2019). These directives are reflected in the curriculum and textbooks that teachers are required to use (Fuchs et al., 2019).

In line with educational trends across the world today, the educational system in Israel espouses a philosophy of inclusion of pupils with diverse needs in regular education (Shaked, 2020). Inclusion laws relate primarily to the rights of pupils with various special educational needs (SEN), to be included in the most appropriate educational setting, where pupils will have their complex educational needs suitably met. Beyond general guidelines regarding the types of services that students should receive, however, there are no specific directives for regular education teachers as to exactly how to include these students in the study of specific subject matter, such as English as a foreign language (EFL). This, even though the study of English is mandatory for all pupils beginning in primary school in order to complete their matriculation from secondary school. As a result, regular education teachers of EFL report a lack of necessary knowledge and skills to teach students with SEN (Russak, 2016).

The category of SEN includes multiple learning disabilities, among them dyslexia. Dyslexia is a learning disability that presents as difficulties with accurate and/or fluent word reading and/or spelling. It results from a deficit with phonological processing, or speech-based coding which affects processing oral and written forms of language (Wagner & Torgesen, 1987). Thus, dyslexia affects language acquisition processes across languages (Kormos, 2017a, 2017b, 2020; Kormos & Nijakowska, 2017; Kormos & Smith, 2023; Pugh & Verhoeven, 2018). Vocabulary knowledge and reading comprehension skills can also be impacted by poor word reading skills, however these difficulties are a by-product of dyslexia and not a core element of the disability (Kearns et al., 2019; Lyon et al., 2003).

While the impact of dyslexia on acquisition of basic literacy skills has been reported across languages, research suggests that orthographic depth also impacts the rate and accuracy of acquisition of literacy (Borleffs et al., 2019;

Seymour et al., 2003; Ziegler & Goswami, 2005). Thus, a child acquiring literacy in German, a language with a shallow orthography, will learn how to read words accurately in much less time than a child acquiring literacy in English (Landerl et al., 1997). In the case of bilingual children with and without dyslexia, reading will be acquired faster and more accurately in the language with the shallower orthography (Lallier et al., 2014). Within learner cross-language effects for orthographic depth have also been reported for acquisition of additional languages, suggesting that when the orthography of the L1 is shallow, acquisition of reading in an additional deeper orthography should be facilitated (van Daal & Wass, 2017). Thus, while dyslexia has a direct and detrimental impact on the acquisition of reading skills, the interplay between dyslexia and orthographic depth may further confound literacy acquisition processes. Therefore, it is imperative that teachers of EFL have solid linguistic knowledge in addition to an understanding about the impact of dyslexia on language learning.

EFL teacher training programs in Israel provide three training tracks: primary (first through sixth grades), secondary (seventh through twelfth grades) and multi-aged which includes both tracks. In the field, primary schools usually include first through sixth grades although there are some schools that go up to eight grades. Secondary schools are usually divided into junior high school (7–9 grades), and high schools (10–12 grades), although there are also regional six-year secondary schools (7–12 grades). Teachers teach multiple grades within each school setting and may also move from teaching one subject to another as long as they have the required certifications.

While laws require the inclusion of pupils with dyslexia and other special educational needs in the regular class setting, pre-service training programs in Israel place minimal emphasis on inclusion of students with SEN. Thus, pre-service EFL teachers receive little if any explicit instruction regarding the nature and needs of this population and have limited exposure to this population in their teaching practice. Similar situations have been reported in other countries where EFL teacher trainees are not required to take courses that deal with SEN pedagogy (Cimermanová, 2017; Lu et al., 2022) and lack exposure and experience teaching these students in their practice teaching (Loreman et al., 2013; Nel, et al., 2023; Pinnock & Nicholls, 2012). Moreover, neither the national curriculum nor the nationally approved textbooks include concrete practices for teaching students with any types of SEN. However, there is a Ministry document that suggests adaptations to the regular curriculum (Ministry of Education Pedagogical Affairs Department of Curricula Planning and Development, 2008), along with several textbooks that are not ministry approved as regular course books but are promoted as supplementary materials that teachers can use to teach struggling students alongside the approved materials, for example Russak (2000), Russak and Dobkins (1997, 1998). While these materials exist, they are

not part of any official program so only teachers who are interested and look for them will find them.

EFL Teacher Preparedness for Inclusion

EFL teacher preparedness for inclusion is an important factor shaping teachers' inclusive instructional practices and determining the way in which the needs of learners with dyslexia are met in EFL regular classroom. The concept of EFL teacher preparedness for including learners with dyslexia comprises the following building blocks: teacher knowledge and self-efficacy beliefs as well as stance towards inclusion (Nijakowska, 2019, 2022a). Teacher knowledge concerns understanding the nature of specific learning difficulties in reading and writing and their potential impact on the study of additional languages. This is linked to background linguistic content knowledge (including language and literacy concepts) and knowledge of effective instructional practices and intervention programs (Kahn-Horwitz, 2016; McCutchen et al., 2009; Nijakowska, 2022a; Podhajski et al., 2009).

To date, studies of teacher knowledge across subject areas have reported low scores. For example, in a study of conceptual knowledge about dyslexia among teachers who were required to provide evidence-based structured literacy instruction for students with dyslexia, inconsistent levels of terminological knowledge were found. Training significantly predicted dyslexia knowledge, while years of experience did not (Peltier et al., 2022). Similar effects for training over years of experience were reported to impact EFL teachers' perceptions regarding inclusion of students with dyslexia (Indrarathne, 2019; Kormos & Nijakowska, 2017; Nijakowska, 2014; Nijakowska et al., 2018). Scores on tests of teachers' content knowledge about basic language constructs for teaching literacy are also very low, indicating gaps in teacher knowledge in both English as L1 (McCutchen et al., 2002; Moats, 2020) and EFL (Goldfus, 2012; Vaisman & Kahn-Horwitz, 2019; Wong & Russak, 2020). Studies of EFL teachers' content knowledge for basic language concepts, show that teachers struggle with counting phonemes within words, and also lack knowledge of reading and spelling rules (Goldfus, 2012; Vaisman & Kahn-Horwitz, 2019; Wong & Russak, 2020). These low scores in English are particularly disturbing since, due to orthographic depth, the acquisition of reading and writing in English relies on solid knowledge about the complex ways in which phonemes map onto graphemes. Levels of teacher knowledge have been linked to student achievement as well. Research indicates that students whose teachers have low levels of literacy knowledge tend to exhibit lower levels of literacy skills than those who are taught by teachers with higher levels of teacher knowledge about literacy (McCutchen et al., 2002; Piasta et al., 2009; Zeng, 2023). Fortunately,

focused professional development can significantly improve teachers' knowledge and instructional skills, which in turn improves student learning outcomes (Zeng, 2023).

Teachers' self-efficacy beliefs, defined as teachers' self-reported perceptions and evaluations of how well they feel they are prepared to provide inclusive instruction in order to assure accessibility, participation, and success of all learners, are powerful in that they can influence actual teachers' instructional practices in the classroom (Tschannen-Moran & Woolfolk Hoy, 2001, 2007). In addition to the connection between teacher knowledge and student achievement, teacher knowledge is also associated with teachers' feelings of self-efficacy (Wray et al., 2022). The more pedagogical and content knowledge a teacher has, the more positive she may feel about her practices. Consequently, teachers who have high sense of self-efficacy show more willingness to use varied teaching strategies and demonstrate greater commitment and flexibility when taking on challenges in the classroom, such as including children with special needs (Achurra & Villardón, 2012; Ozder, 2011; Sharma & Sokal, 2016). Thus, teacher self-efficacy also impacts student self-efficacy beliefs and academic achievement (Guo et al., 2012).

An important factor that may influence teacher self-efficacy beliefs and instructional practices is prior contact and experience with teaching students with SEN. A review of teacher self-efficacy for inclusive education practices across 71 studies reported that direct contact with students with different SEN had a strong impact on feelings of self-efficacy (Wray et al., 2022). In support of this, a study comparing special and general education teachers in Greek secondary schools found that among general education teachers, neither age nor teaching experience were significant factors in self-efficacy towards inclusive practices, whereas among special education teachers, the most significant factor in shaping self-efficacy for inclusive practices related to direct contact with students with special needs (Kazanopoulos et al., 2022). Additional studies highlight the significant contribution of exposure and experience teaching students with dyslexia above and beyond training and years of experience (Nijakowska et al., 2018, Nijakowska, 2022b; 2022c; Peltier et al., 2022).

Teachers' stance towards inclusion can be shaped by numerous factors related for instance to the nature and severity of the disability, teachers' age, gender, personality, years of teaching experience, training, direct contact and teaching experience with learners with SEN as well as administrative support at school. Teachers who received high quality training on inclusion as well as those who had positive social and teaching encounters with learners with SEN and were supported by the school show more favourable attitudes towards inclusion of learners with SEN in regular classrooms (Avramidis & Norwich, 2002). Multiple studies across countries report that both pre-service and in-service teachers who have studied special education and/or have teaching certifica-

tion in special education report positive attitudes towards inclusion of students with different SEN in their classes (Lu et al., 2022; Russak, 2016; Tümkaya & Miller, 2020). Teachers with experience teaching in special education expressed higher feelings of self-efficacy for inclusive practices (Kazanopoulos et al., 2022). However, studies also report that teachers of EFL usually lack training in special education (Lu et al., 2022; Russak, 2016), unless they were able to obtain multiple teaching certifications, as is the case in Israel. Importantly, research findings confirm the effectiveness of teacher training in developing, modifying and boosting teachers' self-efficacy beliefs and attitudes towards inclusion in general and EFL educational context (Kormos & Nijakowska, 2017; Nijakowska, 2022b, 2022c; Sharma & Nuttal, 2016; Sharma & Sokal, 2015).

In this study, we focused specifically on the SEN dyslexia in the context of the EFL teaching and learning because of the direct and adverse connection between dyslexia and literacy acquisition across languages (Ziegler & Goswami, 2005). The aim of the study was to investigate Israeli EFL teachers' perceived preparedness to include learners with dyslexia in regular education classrooms and to verify whether cross-country differences exist in this respect. The study also determined the effects of demographic variables (training, teaching experience, level of education, type of certification, type of teaching experience with learners with dyslexia) on Israeli EFL teachers' beliefs about how well they think they are prepared for inclusive teaching of learners with dyslexia and identified their professional development needs in this area, using the teachers' perceived preparedness to include learners with dyslexia in mainstream classrooms (TEPID) questionnaire. The reported study addressed the following research questions:

RQ1: Do pre-service EFL teachers (teacher trainees) differ from in-service EFL teachers on TEPID?

RQ2: Does the overall teaching experience (operationalized as years of teaching) have an impact on EFL teachers' TEPID?

RQ3: Do EFL teachers with higher levels of education (degrees) differ from teachers with lower levels of education (degrees) on TEPID?

RQ4: What is the relationship between types of certification and TEPID scores?

RQ5: Does the type of experience relating to teaching EFL learners with dyslexia have an impact on the EFL teachers' TEPID?

RQ6: Do pre-service and in-service EFL teachers from Israel differ from pre-service and in-service teachers from Greece, Cyprus, and Poland regarding beliefs about their preparedness to include EFL learners with dyslexia in mainstream classrooms (TEPID)?

RQ7: What are the Israeli EFL teachers' professional development needs around inclusive teaching?

Method

Participants

Data were collected from 180 EFL pre-service—46 (26%) and in-service—134 (74%) teachers in Israel. Most of the study participants—149 (83%) were female; 86 (48%) were 46 and above, 51 (28%) were between 35–45 years old. Younger teachers, 25 and below and between 26–35 years of age, constituted 10% and 14% of the sample respectively. As far as the number of years of teaching experience is concerned, 85 (47%) respondents reported more than 10 years of teaching experience, 28 (16%) had been teaching for 6–10 years, 53 (29%) had 1–5 years of experience, while 14 (8%) had no teaching experience. Seven (4%) had completed secondary school, 69 (38%) held BA degree, 93 (52%) MA, and 7 (4%) PhD.

Since Israeli EFL teachers usually teach multiple grades and some schools include primary and lower secondary grades and some include lower and higher secondary grades as explained above, teachers were allowed to mark multiple answers to four questions. Since the categories were not mutually exclusive, the reported numbers (*n*) for types of school (grades), pupils' age, experiences teaching students with dyslexia, and type of certification do not add up to the number of participants ($n = 180$) but reflect the diverse teaching contexts and experiences for EFL teachers in Israel (see Table 1). Most teachers taught in lower secondary school (Jr. High, grades 7–9)—96 (27%) and upper secondary school (High School, grades 10–12)—119 (34%), 45 (13%) in primary school, while only 5 (1%) in kindergarten, 5 (1%) in language schools, and 23 (7%) at the tertiary level (college, university). As many as 57 (16%) teachers reported they conducted one-to-one lessons. The lower representation in the primary school and kindergarten could be due to low levels of English among those who teach in these contexts (Wilden & Porsch, 2017). As these teachers may not feel confident in their levels of English, they tend to shy away from filling out surveys written in English.

As many as 77% of the teachers reported some experience teaching learners with dyslexia, ranging from more general classes with some students with dyslexia—156 (36%) and classes with pupils with exemptions from testing due to dyslexia—52 (12%) to closer contact in special classes for students with dyslexia 46 (10.5%) and one-to-one lessons 81 (18.5%). Most study participants—141 (47%)—held a teaching certificate for secondary schools; 84 (28%) were qualified to teach in primary schools and 40 (13%) in special education. Twenty-eight (9%) reported they also had other teaching qualifications, but here too, as explained above, teachers could have multiple certifications. Nine (3%) participants admitted they had not been awarded any qualifications yet.

Specifically, in Israel many teachers get a multi-age certification meaning that they are certified for both primary and secondary school. Table 1 presents the demographic characteristics of the study population.

Table 1

Demographic Information about the Study Participants

Variables	*n*	[%]
Level of training		
Pre-service	46	26
In-service	134	74
Gender		
Male	31	17
Female	149	83
Age		
25 or below	18	10
26–35	25	14
35–45	51	28
46 or above	86	48
Teaching experience		
None	14	8
1–5 years	53	29
6–10 years	28	16
More than 10 years	85	47
Type of school*		
Kindergarten	5	1
Primary school	45	13
Lower secondary school (Jr. High, grades 7–9)	96	27
Upper secondary school (High School, grades 10–12)	119	34
College, University	23	7
Language school	5	1
One-to-one tuition	57	16
Not applicable	5	1
Age of pupils taught*		
Under 5	5	1.5
6–12 years old	51	16
13–15 years old	112	36
16–18 years old	112	36
Older than 18 years old	30	10
Not applicable	2	0.5
Experience teaching pupils with dyslexia*		
Classes without students with dyslexia	87	20
Classes with some students with dyslexia	156	36
Special classes for students with dyslexia	46	10.5
Classes with pupils with exemptions from testing due to dyslexia	52	12
One-to-one sessions with dyslexic children	81	18.5
Not applicable	14	3

Variables	*n*	[%]
Level of education completed (highest degree)		
Secondary school	7	4
Bachelor's degree	69	38
Master's degree	93	52
PhD	7	4
Other	4	2
Type of certification*		
EFL Primary school	84	28
EFL secondary school	141	47
Special education	40	13
Other	28	9
Not applicable	9	3

* The reported *n* in particular categories do not add up to 180 because the categories were not mutually exclusive (multiple answers were allowed in these questions).

Instruments

To measure the pre-service and in-service Israeli EFL teachers' beliefs relating to their preparedness to include learners with dyslexia in mainstream classrooms the slightly adapted version of the DysTEFL—Needs Analysis Questionnaire Revised (DysTEFL-NAQ-R) (Nijakowska et al., 2018; 2020) was used. To ensure that the participants understood who the target population was, the introduction to the survey specified that we were using the term dyslexia to describe students who have difficulties with accurate and/or fluent word recognition, word decoding, spelling and/or reading comprehension as a consequence of reading difficulties (Lyon et al., 2003). The questionnaire was provided in English and all responses were received in English.

The demographic part of the questionnaire was composed of ten questions, nine retained from the original questionnaire, collecting information relating to the participants' level of training (pre-service vs. in-service), country where they teach or study to become teachers, gender, age, teaching experience (in years), highest level of education (degree), type of school they teach at, their students' age, type of experience in teaching students with dyslexia. Multiple answers could be selected to the last three questions. The additional question (also allowing multiple answers) asked about the type of teaching certificate teacher had been awarded.

The 24-item TEPID (Teacher of English Preparedness to Include Dyslexics) scale constituted the second part of the questionnaire, which referred to accommodating the learning needs of EFL learners with dyslexia. Each item was a statement followed by a 6-point Likert scale, ranging from 1 = "definitely not true of me" to 6 = "definitely true of me." The higher the overall score the greater the pre-service and in-service EFL teacher's preparedness to include

learners with dyslexia in EFL classrooms. The generalizability of the TEPID scale was confirmed by the analysis of measurement invariance across different ethnic groups. The scale proved to be a useful tool for investigating perceived teacher preparedness to include learners with dyslexia and variables that influence TEPID and for comparing the results across countries (Nijakowska et al., 2020).

Data used to verify the Israeli EFL teachers' professional training needs on dyslexia and inclusive instructional practices was collected via the final part of the questionnaire including four questions which asked about prior training on dyslexia and inclusive instructional practices, as well as professional training needs. Questions concerning the preferred format of the training, content/topics, tasks, and activities allowed to select multiple answers.

Procedure

The questionnaire was administered online using the Google Forms tool. Invitation to participate in the study was popularised via professional and teacher training networks, teachers' associations, conferences, and events. In an opening letter to teachers, which was appended at the beginning of the survey, respondents were informed about the purpose of the study. Participation in the study was voluntary and anonymous. The data was collected in 2022, for the period of four months. Only responses from participants who indicated that they either teach or study to teach EFL in Israel were analysed. Only complete responses were analysed.

Results

Factor Analysis

To answer the research questions, we first conducted a principal component analysis (PCA) to examine the factorial structure of the preparedness scale on the Israeli sample on all data (24 items) with orthogonal rotation (varimax). All 24 items correlated at least .3 with at least one other item. The sample (n = 180) met the criterium of having between 5–10 participants per variable. The Kaiser-Meyer-Olkin measure verified the sampling adequacy. KMO equalled .93, which is superb, well above the acceptable limit of .5 (Field, 2009). All the diagonals of the anti-image correlation matrix (KMO values for individual items) were well over .5, with the lowest value of .759, justifying the inclusion

of all the items in factor analysis. Bartlett's test of sphericity was significant for the dataset ($\chi^2(276) = 2958.46$, $p < .001$) and indicated that correlations between items were sufficiently large for PCA. The communalities were all above .3, indicating that each item shared some common variance with other items. The sample ($n = 180$) was well suited for the analysis.

Four components had eigenvalues over Kaiser's criterion of 1 and overall, they explained 65.30% of the variance. The eigenvalue for factor 1 was 10.93, for factor 2 it equalled 2.44, for factor 3 it was 1.25, and for factor 4 it had a value of 1.06. The initial eigenvalues showed that the first factor explained 45.54% of the variance, the second factor 10.17% of the variance, the third factor 5.19%, and, finally, the fourth factor 4.40%. However, the four-factor solution was not retained. The two-factor solution was chosen instead due to several reasons. The four-factor solution lacked theoretical grounding and proved difficult to interpret. The scree plot analysis showed that the scree flattened out and tailed downwards after the second factor. Inspecting the factor loading revealed that the number of primary loadings in factors 3 and 4 was not sufficient, there was only one primary loading in factor 3 (item 1) and no primary loadings in factor 4. All the other loadings for factors 3 and 4 were small and very small. Two items (1 and 11) proved problematic. Item 1 loaded primarily on factor 3 but it also loaded on factor 1 and 4 (small loadings). Item 11 had a small primary loading on factor 1 and a comparable loading on factor 3, in addition it also loaded on the remaining two factors. Items 1 and 11 were removed from the scale. For all further analysis 22 out of 24 items were used. All the remaining items had primary loadings over .66 and .51, for factor 1 and 2 respectively.

A two-factor solution involved the following factors underlying the construct of preparedness: factor 1 (F1)—beliefs about possessed knowledge of dyslexia and self-efficacy in implementing inclusive instructional practices with dyslexic learners (knowledge and skills) (16 variables included, cut-off point .666) and factor 2 (F2)—beliefs about general inclusion principles towards dyslexic FL learners (stance towards inclusion) (6 variables included, cut-off point .516). The reached solution is consistent with an earlier cross-country study (involving the Polish, Greek and Cypriot context) on EFL teacher preparedness to include learners with dyslexia in mainstream classroom which used the TEPID scale (Nijakowska, 2022a; Nijakowska et al., 2018, 2020).

The reliability of the preparedness subscales ranged from reliable to very highly reliable. Self-efficacy beliefs and knowledge scale had a very high internal consistency ($\alpha = .959$). The attitude scale was reliable ($\alpha = .775$) (Cohen et al., 2011). Table 2 shows the factor loadings after rotation along with item means and standard deviations.

Table 2

Factor Loadings after Rotation for 24 Items of the Preparedness Scale, Means and Standard Deviations for the Israeli Sample (n = 180)

Item	Factor loading				Means and SD	
	F1	F2	F3	F4	M	SD
8. I can modify the way teaching materials are presented to accommodate individual learning needs of learners with dyslexia.	.884				4.13	1.42
7. I can provide differentiated instruction to cater for the individual needs of learners with dyslexia.	.857				4.06	1.49
14. I can help foreign language learners with dyslexia to develop effective learning strategies.	.847				4.33	1.32
24. I can differentiate tasks and assignments to cater for individual learning needs of learners with dyslexia.	.844				4.22	1.37
16. I can foster autonomy in foreign language learners with dyslexia.	.812				4.03	1.30
19. I am familiar with other learning difficulties often associated with dyslexia.	.812				4.27	1.41
10. I can personalize assessment techniques to evaluate progress of my foreign language learners with dyslexia.	.801				4.13	1.42
6. I am familiar with the signs of dyslexia.	.793				4.56	1.49
18. I know what to do if I think that one of my students has dyslexia.	.793				4.28	1.43
22. I can manage the classroom environment to cater for individual learning needs of learners with dyslexia.	.764				4.14	1.36
12. I am familiar with the nature of dyslexia.	.756				4.41	1.45
3. I can give feedback to learners with dyslexia in such a way that it boosts their self-esteem.	.749				4.64	1.34
23. I am familiar with the local educational legislation/policy concerning learners with dyslexia.	.745				3.67	1.67
21. I am familiar with the accommodations that learners with dyslexia are entitled to in taking foreign language proficiency exams.	.693				4.37	1.50

Item	Factor loading Means and SD					
	F1	F2	F3	F4	M	SD
2. I am familiar with the difficulties learners with dyslexia experience in foreign language learning.	.690				4.81	1.43
9. I am familiar with the principles of multi-sensory teaching and learning.	.666				4.39	1.56
*11. I believe foreign language teachers should have high expectations for their learners with dyslexia.**	*.463*		*.435*		*4.46*	*1.31*
17. I believe it is important for foreign language teachers to collaborate with parents/ families of their learners with dyslexia.		.637			5.36	.97
20. I believe collaborative teamwork with a range of educational professionals is important for teachers of foreign language learners with dyslexia.		.606			5.49	.82
15. I believe foreign language teachers should differentiate their approach to learners.		.583			5.25	1.01
5. I believe teacher behaviour in a language classroom influences self-esteem of learners with dyslexia.		.572			5.69	.62
13. I believe developing self-determination in foreign language learners with dyslexia is important.		.565			5.24	.93
4. I believe foreign language learners with dyslexia need accommodations in the inclusive language classroom.		516			5.46	.88
*1. I believe foreign language learners with dyslexia benefit from attending regular classes in inclusive education.**			*.707*		*4.13*	*1.31*

Note: Factor loadings < .3 and cross-loadings were suppressed
Extraction Method: Principal Component Analysis.
Rotation method: Varimax with Kaiser Normalization
Two factor solution was retained.
*Items 1 and 11 were removed from further analysis

Effect of Demographic Variables on Teacher Preparedness (TEPID)

The study aimed to determine the effects of demographic variables (training, teaching experience, level of education, type of certification, and type of teaching experience with learners with dyslexia) on beliefs of EFL teachers in Israel

regarding their preparedness to include learners with dyslexia in mainstream classrooms.

Our first research question (RQ1) asked whether Israeli pre-service EFL teachers (teacher trainees) differed from in-service EFL teachers in their perceptions regarding their preparedness to include learners with dyslexia. To answer RQ1, Mann-Whitney U test was used to investigate whether the between-group differences were statistically significant regarding each factor. In-service teachers (n = 134, M = 4.40, Md = 4.56, SD = 1.11) scored higher on F1 than teacher trainees (pre-service teachers) (n = 46, M = 3.92, Md = 4.06, SD = 1.11) and this difference was statistically significant, with a small to medium effect size (U = 2335.0, z = –2.451, $p < .01$, r = .20). This means that in-service teachers' perceived knowledge and self-efficacy beliefs (knowledge and skills) was higher than that of teacher trainees. In-service teachers (n = 134, M = 5.42, Md = 5.58, SD = .58) scored higher on F2 than pre-service teachers (n = 46, M = 5.39, Md = 5.50, SD = .68) but this difference was not statistically significant (U = 3078.0, z = –.013, $p = .989$). Mann-Whitney U test indicated that teacher trainees did not differ from in-service teachers regarding their stance towards inclusion.

RQ2 asked if the overall teaching experience (operationalized as years of teaching) impacts in-service EFL teachers' TEPID. To answer RQ2, Independent-Samples Kruskal-Wallis test was calculated. The test indicated that teaching experience influenced the respondents' beliefs about their knowledge and skills (F1) with moderate effect size (H(3) = 27.347, $p < .001$, $\varepsilon^2 = .12$), but did not impact their stance towards inclusion (F2) (H(3) = .653, $p = .884$). Epsilon squared was calculated to denote effect sizes of identified differences (Tomczak & Tomczak, 2014). Mann-Whitney U test was used to follow up the finding concerning F1. Pairwise comparisons revealed statistically significant differences in perceived knowledge and self-efficacy beliefs (F1) between the participants who had 1–5 years of teaching experience (n = 53, M = 3.71, Md = 3.94, SD = .96) and those who had 6–10 years of teaching experience (n = 28, M = 4.40, Md = 4.50, SD = 1.22) (U = –34.956, $p = .024$), as well as those who had more than 10 years of teaching experience (n = 85, M = 4.67, Md = 4.75, SD = .95) (U = –46.105, $p < .001$). The significance values were adjusted by the Bonferroni correction for multiple tests (Field, 2009). The more years of teaching the participant had, the more positive her perceptions were regarding perceived knowledge and self-efficacy beliefs (F1). No impact for years of teaching was found on F2.

RQ3 asked about how EFL teachers' the highest completed level of education (degree) relates to their scores on F1 and F2. Independent-Samples Kruskal-Wallis test showed that the level of education (degree) influenced teachers' beliefs about their knowledge and skills (F1) with weak effect size (H(4) = 11.282, $p = .024$, $\varepsilon^2 = .03$) but was not related to their stance towards

inclusion (F2) (H(4) = 7.570, p = .109). The higher the completed level of education (degree), the higher the score on F1. However, Mann-Whitney U test indicated statistically significant differences in perceived knowledge and self-efficacy beliefs (F1) only between PhD holders (n = 7, M = 5.16, Md = 5.69, SD = 1.32) and those who graduated from secondary school (n = 7, M = 3.63, Md = 3.69, SD = .63) (U = –83.714, p = .026).

RQ4 concerned the relationship between types of certification and TEPID scores. Certificate type categories were derived from statements asking about the participants' certification (e.g., "I have a teaching certificate in EFL primary/secondary school"). According to these statements the participants were then divided into three distinct groups of certification qualifications: participants who had EFL certificate only (n = 115), participants who had EFL and special education certificates (n = 35), and a group that did not meet either of these criteria and were termed as 'other' (n = 30). The category of EFL certification included those who had indicated that they were certified in primary, secondary and both primary and secondary school. To answer RQ4, the relationship between certification and factors 1 and 2 was tested. A one-way ANOVA was performed. The analysis showed a significant association for F1 only, where participants who had EFL and special education certificates (M = –0.57, SD = 0.74) scored significantly higher, compared to the other two groups (M = –0.08, SD = 1.00; M = –0.37, SD = 1.00, respectively, F(2,177) = 8.66, p < 0.001). These results indicate that participants with special education certificate reported higher levels of knowledge and skills. The results for F2 were insignificant.

RQ5 looked at how the type of experience relating to teaching EFL learners with dyslexia associate with EFL teachers' TEPID. To answer RQ5, a series of six t-tests were performed. Each test compared the mean scores of F1 and F2 between groups of participants differentiated by their experience with teaching EFL learners with dyslexia. Experience with teaching EFL learners with dyslexia was derived from the answers (yes/no) to type of teaching experience (e.g., "I have taught classes where there are no students with dyslexia" (yes/no). The results of this analysis are presented in Table 3. As seen, teachers who had experience with teaching students with dyslexia reported higher levels of knowledge and skills (F1). These results were significant across all statements. With regards to F2, significant results were found for the statements "I have taught special classes for students with dyslexia" and "I have taught one-to-one sessions for students with dyslexia," indicating that those who responded "yes" to these statements reported a stronger positive stance towards inclusion. All significant results survived FDR correction.

Table 3

Questions Relating to Type of Teaching Experience with Students with and without Dyslexia

Item	Factor	Yes				No					
		n	M	SD	SE	*n*	M	SD	SE	t-test	Cohen's d
I have taught classes where there are no students with dyslexia	1	87	-0.18	0.97	0.10	93	0.17	1.00	0.10	**-2.40***	-0.36
	2	87	-0.11	1.05	0.11	93	0.10	0.94	0.10	-1.46	-0.22
I have taught classes where there are some students with dyslexia	1	156	0.10	0.94	0.08	24	-0.67	1.15	0.23	**3.62*****	0.79
	2	156	0.01	1.00	0.08	24	-0.07	1.02	0.21	0.35	0.08
I have taught special classes for students with dyslexia	1	46	0.57	0.82	0.12	134	-0.20	0.98	0.08	**4.75*****	0.81
	2	46	0.38	0.67	0.10	134	-0.13	1.06	0.09	**3.02****	0.52
I have taught classes with students who are exempted from testing because they have dyslexia	1	52	0.44	0.77	0.11	128	-0.18	1.03	0.09	**3.91*****	0.64
	2	52	0.09	0.95	0.13	128	-0.04	1.02	0.09	0.80	0.13
I have taught one-to-one sessions for students with dyslexia	1	81	0.38	0.86	0.10	99	-0.31	1.00	0.10	**4.95*****	0.74
	2	81	0.22	0.79	0.09	99	-0.18	1.11	0.11	**2.68***	0.70

RQ6 aimed to verify whether EFL teachers from Israel differed from teachers from Greece, Cyprus, and Poland regarding beliefs about their preparedness to include EFL learners with dyslexia in mainstream classrooms (TEPID). Nijakowska et al. (2018, 2020) found out that Greek teachers differed significantly from teachers from Cyprus and Poland and that there were no statistically significant differences between teachers from Poland and Cyprus on both factors of TEPID. In order to answer RQ6 we used data on Cypriot, Polish, and Greek EFL from Nijakowska et al.'s (2018, 2020) study.

Independent-Samples Kruskal-Wallis test indicated that the country in which study respondents teach or study to teach influenced their beliefs about knowledge and skills (F1) with small effect size ($H(3) = 18.316$, $p < .001$, $\varepsilon^2 = .02$) and impacted on their stance towards inclusion (F2) with small effect size ($H(3) = 17.650$, $p < .001$, $\varepsilon^2 = .02$). Mann-Whitney U test was used to follow up the findings concerning F1 and F2. Pairwise comparisons revealed statistically significant differences in perceived knowledge and self-efficacy beliefs (F1)

between Israeli (n = 180, M = 4.28, Md = 4.34, SD = 1.12) and Polish EFL teachers (n = 158, M = 3.89, Md = 4.09, SD = 1.21) (U = –63.860, p = .031) as well as Israeli and Cypriot teachers (n = 155, M = 3.93, Md = 3.93, SD = 1.05) (U = –73.919, p = .008). Similarly, teachers from Israel (n = 180, M = 5.42, Md = 5.50, SD = .60) differed from teachers from Poland (n = 158, M = 5.21, Md = 5.33, SD = .67) (U = –79.171, p = .003), as well as teachers from Cyprus (n = 155, M = 5.21, Md = 5.33, SD = .76) (U = –65.347, p = .025) regarding their stance towards inclusion (F2) and those differences were statistically significant. Statistically significant differences were not found between the Israeli and Greek teachers (F1: n = 233, M = 4.28, Md = 4.38, SD = .94; F2: n = 233, M = 5.41, Md = 5.50, SD = .55) regarding their perceptions of preparedness to include learners with dyslexia with regard to both factors.

EFL Teachers' Professional Development Needs on Inclusive Teaching

Our last research question (RQ7) explored the Israeli EFL teachers' perceived professional development needs around inclusive teaching. As many as 177 teachers filled in the last part of the questionnaire related to professional development needs on inclusive teaching. Data were obtained from four sets of statements. In set one teachers marked their answers on a 6-point Likert scale ranging from "definitely not true of me" to "definitely true of me." In sets two through four respondents could choose more than one answer. The first set focused on prior training and further training needs. As shown in Table 4, more than half (56%) of the in-service teachers indicated they had gained some knowledge about EFL and dyslexia from courses in higher education and teacher training institutions. As many as 60% of the respondents claimed to be self-educated in the area of teaching EFL to dyslexic learners learning from available resources. Most teachers (92%) felt they needed more information about language teaching methods that are effective for dyslexic learners and 86% of the teachers expressed interest in further training around teaching English to learners with dyslexia.

Table 4

EFL Teachers Prior Training and Professional Training Needs on Dyslexia and Inclusive Instructional Practices (in %)

Questions	Definitely not true of me	Mostly not true of me	Somewhat not true of me	Somewhat true of me	Mostly true of me	Definitely true of me
I learnt about how to teach English to learners with dyslexia in my courses at college/university/teacher training institutions.	18% (32)	12% (21)	14% (25)	15% (28)	18% (33)	23% (41)
I learned about how to teach English to learners with dyslexia on my own from available resources.	14% (26)	14% (26)	12% (21)	19% (34)	20% (36)	21% (37)
I feel the need for more information on the language teaching methods effective with dyslexic learners.	1% (3)	3% (5)	4% (7)	17% (30)	**18%** (32)	**57%** (103)
I am interested in further training in the area of teaching English to learners with dyslexia.	4% (8)	4% (8)	6% (10)	13% 23)	**17%** (31)	**56%** (100)

The second set addressed the ideal format of training on EFL and dyslexia. Here, 81% of the participants marked face-to-face training workshops, 80% online resources that can be used for self-study, 77% online learning course, 51% printed self-study materials, and 14% indicated other preferred training formats. Among the 23 other comments, 61% related to on-site training, supervision, observation, and practice in teaching pupils with dyslexia and observing master teachers in real time. The third set addressed preferred content of training courses. Content relating to teaching and assessing language learners with dyslexia received the highest score (all 90% or above) followed by content relating to learning difficulties associated with dyslexia. The distribution of scores across the nine content options can be seen in Table 5.

Table 5

Course Content That Teachers Expressed Interest in Learning More about

Topic	Responses reported in percentages*
Language teaching techniques that assist language learners with dyslexia	97
General teaching and classroom management tips for teaching language learners with dyslexia	92
Assessment of learners with dyslexia in the language classroom	91
Problems dyslexia causes in language learning	90
Learning difficulties associated with dyslexia	89
Accommodations that learners with dyslexia are entitled to in high-stakes exams	85
Nature of dyslexia	75
How dyslexia is diagnosed	73
Other topics	17

The fourth set pertained to which components (tasks and activities) of a training course the teachers felt would be helpful. There were 12 choices which are reported here in order of preference according to percentage scores: watching videos of classrooms (94%), learning how to design language teaching materials for learners with dyslexia (92%), listening to/reading interviews with learners with dyslexia (91%), listening to/reading interviews with teachers of dyslexic learners (89%), designing lesson plans so that the needs of learners with dyslexia are catered for (89%), brief lectures (88%), evaluating language teaching materials designed for learners with dyslexia (84%), reading online resource materials (81%), evaluating lesson plans (75%), reading articles (66%), reading book chapters (45%), and other tasks and activities (19%). Teachers found examining case studies and designing lesson plans useful, especially when immediate feedback from mentors/trainers can be provided. Respondents also stressed the value of direct contact and experience with learners with dyslexia (e.g., “I believe there is nothing better than the actual encounter with the students in the classroom to give all parties the feeling and understanding of the difficulty”).

Discussion

The present study examined the impact of demographic variables on EFL teachers' preparedness to include students with dyslexia in the regular class using a two-factor model. Factor one (F1) comprised beliefs about possessed knowledge of dyslexia and self-efficacy in implementing inclusive instructional practices with dyslexic learners (knowledge and skills) and factor 2 (F2) comprised beliefs about general inclusion principles towards dyslexic FL learners (stance towards inclusion). In what follows we will discuss findings relating to each research question.

Our RQ1 examined differences in perceptions regarding preparedness to include learners with dyslexia between Israeli pre-service and in-service EFL teachers. Significantly lower scores on F1 among pre-service teachers could have several explanations. Firstly, whereas the latest revisions by the Council for Higher Education in Israel have called for including courses on teaching English to students with SEN in teacher training programs, the changes have yet to be implemented on a national level. Thus, while some programs may include attention to identifying or including students with any sort of special educational needs, most programs have no courses of this nature, particularly inclusion of students with specific learning difficulties such as dyslexia in EFL classes. It is noteworthy that this lack of sufficient preparation to include students with any form of SEN in teacher training courses is not unique to Israel (Cimermanová, 2017; Loreman et al., 2013; Nel et al., 2023; Pinnock & Nicholls, 2012). Secondly, within the context of the practical component of EFL teacher training, pre-service teachers get little if any exposure and experience with directly teaching students with dyslexia because they are placed in regular education schools. They may be exposed to students with dyslexia in the classes they observe and teach, but the emphasis of their training is on teaching normative students in regular classes, as their certification is for teaching EFL in regular education settings. They may be asked to tutor struggling students, but they rarely get guidance as to how to help them because regular EFL teachers themselves are products of the EFL teacher training system and thus have little if any training in teaching students with dyslexia (Sharma et al., 2013). Thus, mentor teachers are not well prepared to be role models to student teachers in this respect either (Pinnock & Nicholls, 2012). Pre- and in-service EFL teachers do not differ as far as stance towards inclusion is concerned. Their attitudes are very positive.

RQ2 considered the impact of years of teaching on in-service EFL teachers' TEPID. Our results indicated significant differences on F1 between those who had up to five years teaching experience and those who had six or more years of teaching experience. Teachers with more years of teaching experience per-

ceived their knowledge about dyslexia and self-efficacy in implementing inclusive instructional practices with dyslexic EFL learners as greater in comparison to their less experienced colleagues. These findings are contrary to those of earlier studies (Indrarathne, 2019; Kormos & Nijakowska, 2017; Nijakowska, 2014; Nijakowska et al., 2018; Peltier et al., 2022) which found that years of teaching experience were secondary to specific experience with teaching students with dyslexia for improving perceptions of preparedness. The difference with our findings could be due to differences in the composition of teaching positions across countries. EFL teachers in Israel are not assigned to teach one grade or one ability level only but are required to teach multiple grades and ability levels as part of their teaching position. This increases their cumulative exposure to different learner populations. Study participants were not differentiated by the years of teaching as regards their stance towards inclusion (F2).

RQ3 examined the impact of level of education on TEPID scores. In line with earlier findings (Nijakowska et al., 2018), our findings indicated that the higher the completed level of education (degree), the higher the score on F1. However, statistically significant differences were only found between PhD holders and those who had only graduated from secondary school. It seems that teachers' perceptions about their preparedness do not increase significantly with the consecutive degrees they gain. This might mean that relevant training on SEN is missing or insufficient on all these levels. Higher degree (for instance MA vs. BA) does not seem to guarantee increased perceptions on TEPID. It is the type of certification, years and type of experience that seem to matter. PhD holders could possibly have access to training, materials, resources that teachers who only graduated from secondary school did not have. Moreover, secondary school graduates have not yet begun academic degree programs, so their cumulative academic experiences are much lower than those of PhD holders who generally have a long history of learning experiences. Stance towards inclusion (F2) was not impacted by the level of education.

Our RQ4 examined the relationship between type of certification and TEPID scores. Due to the unique EFL certification regulations in Israel, which allow single or multi-tracked certifications for elementary, secondary school, or both, as well as cross-disciplinary certifications, we determined two distinct groups of certification types: EFL only and EFL with special education. In line with the previous studies (Lu et al., 2022; Tümkaya & Miller, 2020), we found that teachers who had special education certification in addition to EFL showed higher levels of perceived knowledge and self-efficacy beliefs (F1) regarding inclusion of students with dyslexia in their EFL classes. This could be the result of the content of their training programs which increases their professional knowledge, and also provides onsite training and practice with teaching students with different SEN as a part of the teacher training program.

Type of certification did not differentiate the respondents in terms of their attitude to inclusion (F2).

RQ5 examined type of teaching experience in relation to TEPID. Our findings highlighted the strong connection between direct experience teaching students with dyslexia and preparedness to include these students in the EFL class, which exists in the extant literature (Kazanopoulos et al., 2022; Kormos & Nijakowska, 2017; Nijakowska et al., 2018, Nijakowska, 2022b, 2022c; Peltier et al. 2022; Wray et al., 2022). Teachers who had direct teaching experience with learners with dyslexia scored higher on F1. This means their perceptions of knowledge and skills to effectively teach learners with dyslexia were more favourable than in the case of teachers who did not have such experiences. With regards to F2, only two types of teaching experience showed an impact on attitude to include students with dyslexia, namely, teaching special classes for students with dyslexia and teaching students with dyslexia in one-to-one sessions. Unique to these two teaching experiences is the specific focus on students with dyslexia exclusively and not as a subset of a regular class. Our findings gain support from previous studies that highlighted the importance of direct contact with students with SEN, one of which being dyslexia, on self-efficacy towards inclusion (Kazanopoulos, et al., 2022; Nijakowska et al., 2018, Nijakowska, 2022b; 2022c; Peltier et al. 2022; Wray et al., 2022).

RQ6 was a cross-country comparison of EFL teacher preparedness to include learners with dyslexia in mainstream classrooms (TEPID). In line with Nijakowska et al. (2018, 2020), teachers from Israel differed significantly on both factors of TEPID from teachers from Poland and Cyprus, but they did not differ from Greek teachers. Both Greek and Israeli teachers evaluated their knowledge and skills (F1) as well as stance towards inclusion (F2) higher than Polish and Cypriot teachers. These findings suggest that Israeli and Greek pre- and in-service EFL teachers held more favourable, positive, and optimistic views of their preparedness to include EFL learners with dyslexia and believed they were more competent and better prepared to include learners with dyslexia than their colleagues from Poland and Cyprus. Differences across countries in perceptions regarding preparedness for inclusion, among other reasons, could be attributed to differences in teacher training programs and educational policies (Tümkaya & Miller, 2020). However, any concrete conclusions would require closer investigation of teacher training requirements and curricula across countries.

RQ7 examined Israeli EFL teachers' prior training and perceived professional development needs regarding teaching students with dyslexia. While more than half of the teachers indicated that they had gained some knowledge about EFL and dyslexia from courses in higher education and teacher training institutions, the majority claimed to be self-educated, and expressed a strong need for additional information and training. These findings support earlier

claims that teachers lack sufficient formal training in inclusion of students with dyslexia in the regular EFL class (Cimermanová, 2017; Lu et al., 2022; Nijakowska, 2014; Russak, 2016), and they align with findings from Nijakowska et al. (2018) who found that EFL teachers from Poland, Cyprus and Greece felt they needed more information on effective language teaching methods for students with dyslexia and expressed interest in further professional development and training. Taken together, these findings corroborate the notion that professional training needs of EFL teachers regarding inclusion of students with SEN are not sufficiently addressed in existing training programs and curricular materials and program requirements could benefit from re-evaluation in this area (Nijakowska et al., 2018).

Teachers expressed willingness to learn about teaching EFL to students with dyslexia through a range of formats including face-to-face, on-line, and self-study. Some also expressed interest in learning in contexts that would bring them in direct contact with students with dyslexia. While any form of teacher training specifically relating to teaching EFL to students with dyslexia would be beneficial, teaching formats that promote direct exposure and on-site practice teaching students with dyslexia have been shown to positively impact teachers' feelings of self-efficacy and teaching (Avramidis & Norwich, 2002; Kazanopoulos et al., 2022; Nijakowska et al., 2018, Nijakowska, 2022b, 2022c; Peltier et al., 2022; Wray et al., 2022).

The content that teachers were most interested in learning more about in order to teach EFL to students with dyslexia related to teaching techniques and tips and assessment practices, reflecting earlier findings which showed that teachers are mostly interested in "applied, hands-on, and practical content that could help them tackle everyday teaching challenges" (Nijakowska et al., 2018, p. 369). Although learning about theoretical content, relating to the nature of and diagnosis of dyslexia had the lowest scores, these topics should still be included in EFL teacher training since improved knowledge about dyslexia, causes, legislation and policy have been shown to impact teaching efficacy (Forlin et al., 2014; Indrarathne, 2019; Kormos & Nijakowska, 2014, 2017; Nijakowska et al., 2018; Nel et al., 2023).

Conclusion

The present study examined the impact of demographic characteristics on teachers' preparedness to include students with dyslexia in the regular class and teachers' professional training needs in a small sample of Israeli EFL teachers. Levels of preparedness were assessed based on teachers' beliefs and

perceptions, which were not supported by observations of teaching practices. This could have led to inflated or deflated assessments of levels of preparedness. A mixed-method approach including teacher interviews, classroom observations or teacher journals in addition to the self-report questionnaire could be used in the future to corroborate findings from self-report instruments, leading to possibly more reliable results.

The present results contribute to sharpening our understanding of this topic across countries while highlighting recurrent themes. All demographic variables, including training, years of classroom teaching experience, level of education, type of certification, type of teaching experience significantly impacted Israeli teachers' beliefs about their level of knowledge and skills, however, only type of experience teaching learners with dyslexia impacted attitudes about including these students. Specifically, those teachers who had taught special education classes and those who had taught students with dyslexia in one-on-one situations had a significantly more positive stance towards including these students. Not only was this finding in line with earlier findings regarding teachers' willingness to include learners with dyslexia (Kazanopoulos et al., 2022; Nijakowska et al., 2018, Nijakowska, 2022b, 2022c; Peltier et al., 2022; Wray et al., 2022), but it also has direct implications for teacher training and professional development programs. Explicitly, incorporating opportunities for direct contact, social encounters, and teaching practices with learners with SEN should be taken into consideration when designing teacher training and professional development courses since research shows that professional development can have a positive impact on teacher knowledge and practice (Zeng, 2023). Onsite mentoring, observation, and guided practice teaching of students with dyslexia could also improve perceived knowledge, self-efficacy beliefs and stance towards inclusion among EFL teachers who do not receive these experiences as component of their teacher training programs. If pre-service and in-service teachers can participate in intensive training courses about dyslexia and foreign language teaching, incorporating exposure and practice with this special needs population, their self-efficacy beliefs and concerns related to implementing inclusive instructional practices with learners with dyslexia, as well as their attitudes to inclusion in foreign language education can change (Kormos & Nijakowska, 2017; Nijakowska, 2022b, 2022c).

In addition, our findings relating to the professional training needs of our participants indicate that present teacher training programs do not provide enough quality content, which leads teachers to search for information and resources on their own. Fortunately, teachers acknowledged the need for more information and expressed high levels of interest in getting practical tools and tips to enhance their teaching and assessing skills, when teaching students with dyslexia. Taken together, this information about desired content and delivery formats can serve as a blueprint for curriculum design for teacher training and

continued professional development towards inclusion of students with not only dyslexia, but all kinds of SEN in the foreign language class. Providing teachers with relevant and up-to-date content can increase their feelings of self-efficacy and in turn their perceived preparedness to include students with dyslexia (Kormos & Nijakowska, 2017; Nijakowska, 2022b, 2022c).

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