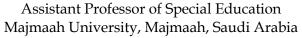
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Investigating the Extent of Training Needs of Teachers of Students with Learning Disabilities: A Survey of Teachers' Perspectives

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Abstract. The current study aimed to investigate the extent and areas of training needs of teachers of students with learning disabilities (LD) as well as the extent to which some demographic variables influence the training needs for LD teachers. The researcher adopted a quantitative research method using a 42-item questionnaire as a data collection tool. The sample consisted of 432 LD teachers working in the programs designed for LD students in public schools in Riyadh. Teachers were selected using the simple random sampling method. The data were analyzed using descriptive and inferential statistical techniques. The results indicated that the most of the questionnaire items represented moderate training needs (mean = 2.78) for the teachers. The results indicated that, to a certain extent, gender influenced the extent of training needs of teachers working with LD students. For example, male teachers had more training needs than female teachers. Qualification and years of teaching experience were found to influence the training needs of participants in this study, for example, teachers with bachelor's degrees were found to have more training needs than those with master's degrees, while those with less than 5 years of experience have more training needs comparing to other groups. Implications and recommendation for designing LD teachers' professional development programs are discussed.

Keywords: training needs; teachers; learning disabilities; public school; Riyadh

1. Introduction

Professional development and continuous in-service training have become indispensable requirements for updating and refreshing the experiences and promoting the effectiveness of special education teachers. These changes came with the emergence of the special education field and the enactment of laws and legislation guaranteeing disabled individuals appropriate educational services compatible with their capabilities. Modern education trends also pose many

challenges in preparing, training, and qualifying special education teachers (Alayed & Alayed, 2015; Alkhateeb, 2015).

The emergence of continuous professional development also put the in-service development programs of special education teachers under the microscope. In other words, evaluating these programs and judging their suitability to keep pace with the needs of students living with disabilities and the requirements of modern trends is an issue of interest (Abuhusain & Abdulrahman, 2016). In addition, attention to in-service programs for teachers working with students with learning disabilities (LD) is driven by the need for continuous professional development, a vital process that raises teachers' competence and reforms their shortcomings by reconsidering and improving their skills to acquire the teaching competencies necessary for their educational work. In-service professional development provides LD teachers with knowledge, skills, and modern developing trends directly related to their field of work. Moreover, LD teachers urgently need continuous in-service training and qualifications as they work with the most diverse categories of special education in terms of abilities and characteristics. Particularly, they need to provide educational content in various innovative ways, use special teaching aids, and develop individual educational programs that differ from those offered to ordinary students (Alkhateeb, 2015).

Despite the importance of continuous training and qualification for in-service LD teachers, their professional shortcomings are one of the most serious problems curbing the success of educational and support services provided to their students (Alshamare, 2019). Various studies (Alayed & Alayed, 2015; Alshamare, 2019) have confirmed that the quality of training programs provided to LD teachers is poor, as they are not mainly based on the findings of studies on the training needs of teachers. Instead, they are heavily limited on the theoretical side, implemented in short periods, and based on inappropriate mechanisms for evaluating the training elements. In-service training and qualification programs for LD teachers must be based on the research findings on their training needs to prepare them professionally and functionally, and to provide them with the necessary competencies to help their students (Alkhateeb, 2015; Alshamare, 2019). Moreover, identifying training needs of LD teachers is essential to assess the quality of the existing educational process through detecting its strengths and weaknesses. Identification of training needs of LD teachers also reveals the training level and scope that cadres need as well as exposing their levels of satisfaction regarding the existing training programs (Alayed & Alayed, 2015).

Identifying these needs is essential in defining and implementing the necessary input for the training programs provided. Importantly, these training needs are not static but dynamic. They change and are affected by developments in learning disabilities and the needs and experiences of the teachers themselves. Therefore, they must be studied and re-evaluated periodically so that the efficiency of teacher training is commensurate with ongoing changes and developments (Abuhusain & Abdulrahman, 2016).

Hence, there seems to be an urgent need to identify the extent and areas of training needs of LD teachers from their point of view as well as examine the influence of some demographic variables on the extent of training needs of those

teachers. That is a necessary step contributing to properly directing the future training and professional development processes to improve LD teachers' performance. It also helps to refine LD teachers' competencies, strengthens their expertise, and consequently improves their practices in the educational process.

2. Literature Review

A review of relevant literature has been carried out and provided in the following six sub-sections.

2.1 Concept of Teacher Training

Boudersa (2016) stated that learning is a changing process because information is not static. Hence, teachers' practices should move beyond traditional methods and become evidence-based and data-driven. He also emphasized the critical role that both empirical data and scientific research play as sources of evidence regarding what works in classrooms. Given that teachers are the most important factor in good education and there is high need for improving their skills and knowledge, many educational agencies worldwide have provided teachers with different training programs. These aim to expose teachers to new knowledge, improve their teaching skills, and provide contemporary knowledge in academic subject domains, which will positively reflect on their students' performance. Alshamare (2019) emphasized that, nowadays, teacher training programs are considered the backbone of improving teachers' profession, knowledge, and teaching practices to meet the different needs of their students.

Richards and Farrell (2005, p. 3) defined the term training as:

"Activities directly focused on a teacher's present responsibilities and typically aimed at short-term and immediate goals. Often it is seen as preparation for instruction into a first teaching position or as preparation to take on a new teaching assignment or responsibility. Training involves understanding basic concepts and principles as prerequisite for applying them to teaching and the ability to demonstrate principles and practices in the classroom. Teacher training also involves trying out new strategies in the classroom, usually with supervision, and monitoring and getting feedback from others on one's practice. The content of training is usually determined by experts and is often available in standard training formats or through prescriptions in methodology books."

Another definition of teacher training has been provided by the Inter-Agency Network for Education in Emergencies, INEE (2010), which refers to teacher training as any type of support, procedures, and processes that are provided to teachers to ensure they effectively instruct and assess their students on curricula, as well as to ensure that teachers continue to improve their teaching practices during their careers. Teacher training programs are usually built based on the needs of both learners and educators.

2.2 Importance of Training Programs for Learning Disabilities Teachers

The importance of suitable training programs for LD teachers, who are in charge of improving students' performance, has never been greater. Individualized learning for students with disabilities continues to be improved by research-

based practices, which satisfies their needs to be sufficiently met and assessed (Monaghan & Columbaro, 2009).

Teacher training programs have been used as a tool to guide educators in assisting their students to master the necessary 21st century skills. Teaching skills such as cleverness in multiple subjects, problem solving, communication, technology literacy, critical thinking, collaboration, and self-direction requires teachers to use efficient teaching techniques that facilitate students' acquisition of these skills (Alshamare, 2019). In addition, due to the unique and heterogenic characteristics of students with LD, the LD teacher is considered the most significant aspect in the process of learning. They must be well-prepared with all strategies, techniques and tools that satisfy the students' needs and facilitate their learning. This is because LD teachers hold the main responsibility as to whether students benefit or suffer from their teaching practices (Almahrej, 2020).

Therefore, efficient training programs play a critical role in helping LD teachers in applying suitable instructional strategies needed to teach these skills to their students (Darlin-Hammond et al., 2017). Also, training programs in the area of LD provide teachers with an opportunity to be familiar with contemporary topics and issues within the field. Training programs are considered also a critical aspect in new LD teachers' professional life. Those teachers often start their career with very little training and formal teaching experience. Therefore, professional training programs are necessary in helping them in starting their career with confidence and building an efficient professional experience (Albluwi, 2019). Moreover, training programs are an important factor for encouraging the innovation and productivity of LD teachers, which will positively reflect on the academic performance of their students (Abuhusain & Abdulrahman, 2016).

Previous studies have pointed out that special education teachers are at high risk for low self-efficacy, have low job satisfaction, burnout, and high stress levels due to the special nature of their career requirements and responsibilities (Brusting et al., 2021; Emery & Vandenberg, 2010). Therefore, increasing the quantity and quality of training programs lowers the risk of experiencing the feeling of burnout (Lauermann & Konig, 2016).

Charney and Conway (2005) highlighted many reasons that raise the importance of establishing training programs for teachers, and these s include:

- The technological revolution. Technology has played an important role in enriching and facilitating the educational process and dealing with different learning resources. However, the effective incorporation of technology in the educational process requires exposing teachers to an adequate training. In other words, teachers should be well-prepared to effectively use technology in education and mitigate its negative effects on the educational process.
- **Job performance assessment.** According to special education standards, teachers' job performance assessments may reveal differences between their actual and expected performance.

- Creating new tasks. Creating new tasks in the workplace calls for providing professional training for teachers to accomplish these tasks with ease and comfort.
- **Promotion.** Promoting teachers may create a gap between their current capabilities, experience, and the requirements of the new position, which sometimes makes them feel incapable of performing the tasks assigned to them.
- **Quality control.** Reports issued by quality control centers may sometimes indicate a defect or decrease in the quality of work due to teachers' ignorance of the work method.
- **Assigning tasks of a special nature.** School administrations may sometimes wish to assign special tasks to teachers who are fully aware that their current abilities do not match the requirements for completing those tasks. In such cases, teacher training is imperative.

2.3 Advantages of Learning Disabilities Training Programs

Teachers gain numerous advantages from well-prepared and effective training programs. One such is that training can assist educators in obtaining the certification and skills they need to efficiently perform their jobs (Haider et al., 2015). Obtaining teacher training helps to effectively satisfy the educational needs of each student in their classrooms and push him/her toward academic success. Mizell (2010) reported that "research confirms that the most important factor contributing to a student's success in school is the quality of teaching" (p. 1). This means that educators who do not desire to learn new teaching skills or improve their teaching practices are unable to support their students through course curricula (Mizell, 2010). Moreover, training programs help teachers to become more effective in their course delivery and evaluation. These programs provide teachers with contemporary teaching techniques, assessment tools, systems, modification ongoing progress monitoring and methods (Thistlethwaite et al., 2012).

When talking specifically about learning disabilities teachers, training programs help LD educators to learn better and contemporary techniques while teaching their students. Training programs also help student teachers to be more efficient in differentiating their lesson styles and modifying the curriculum to better suit learners' requirements in the classrooms. Another advantage of training programs is that LD students achieve better learning outcomes (Abuhusain & Abdulrahman, 2016). However, LD teachers find it challenging to keep up with the rapid changes in curriculum standards, school district requirements, and contemporary educational technologies (Hughes et al., 2016).

Therefore, they need to enroll in training programs that help them provide suitable teaching materials for today's students to become effective teachers. The Institute of Education Sciences of the United States Department of Education demonstrated that educators' enrollment in well-prepared training programs can improve learners' performance by up to 12 percentile points (Lawless & Pellegrino, 2007). Moreover, well-developed training programs can prepare LD educators to effectively utilize diagnostic teaching methods (Albluwi, 2019). Mophoso and Mahlo (2015) pointed out that teachers who are well-trained and

in command of their subject matter can identify their learners' weaknesses and strengths, which makes learning and teaching easier.

2.4 Areas of Training Needs for LD Teachers

The need to obtain ongoing teacher training has become necessary throughout professional life because knowledge is rapidly renewed. Education is an endless process that must not stop after obtaining academic degrees and starting a career (Alqadi, 2018). It is critical for LD teachers to pursue ongoing training to guarantee the best learning performance for their learners and their satisfaction with different aspects of their work (The importance of professional development for educators, n.d.). Even though training is an essential aspect that targets the improvement of the skills of both educators and students, its scope is very varied.

The training needs of LD teachers vary based on their students' individual circumstances, abilities, needs, and the challenges they face in the classroom. Aktan (2020) indicated several training needs of LD teachers. These included the competence in identifying areas of learning difficulties, applying educational diagnosis tests, and developing individualized educational plans. According to Albluwi (2019), other training needs of LD teachers include self-assessment, determining the effectiveness of learning methods, using educational technology, and adapting assessment tools. Further, managing the classroom environment, assessing the effectiveness of individualized educational plans, and using suitable educational aids have been identified as training needs of LD teachers (Hamdan, 2018). It can be concluded that the training needs of LD teachers could vary from one teacher to another based on the surrounding circumstances.

2.5 Importance of Identifying the Training Needs of LD Teachers

Training programs improve work quality by developing methods for enhancing LD teachers' self-abilities and performance on assigned tasks. To ensure the success of the training programs and the realization of their desired goals, they must be based primarily on the accurately identified and defined training needs of the group benefiting from the training. As such, the essential starting point for managing any training process is identifying the true needs of trainees (Albluwi, 2019).

Alsahali and Gan (2012) stated that training needs are the necessary set of changes required in teachers' information, knowledge, experiences, attitudes, and skills to qualify them to achieve the level of performance required by their work with a specific degree of quality and proficiency. Abuhusain and Abdulrahman (2016) defined training needs as a set of what teachers lack in terms of activities, experiences, skills, and competencies. In other words, it refers to which competences, skills, knowledge teachers need to enhance their performance and effectiveness of their practices.

Special education is unique in that it provides special educational alternatives, curricula, and teaching methods for students with learning disabilities who are unable to benefit from the educational services provided in regular schools. Thus, LD teachers must be provided a special kind of professional training to

carry out the tasks in the best possible manner (Alayed & Alayed, 2015). Therefore, the training needs of special education teachers must be accurately identified (Alsubaie, 2014). Identifying such needs is an essential pre-planning stage for any training program, and ignoring this phase results in a wasted effort, time, and money (Najm & Abudaia, 2020). Abuhusain and Abdulrahman (2016) confirmed that the failure of some training programs for special education teachers in the Kingdom of Saudi Arabia is due to the lack of interest in identifying the training needs of these teachers.

Najm and Abudaia (2018) added that identifying training needs is a necessary process in building targeted plans and programs that meet the actual needs of teachers, instead of wasting time and effort in training teachers on aspects that do not add to their knowledge structure. Almerich et al. (2011) indicated that identifying the training needs of teachers contributes to the design of high-quality training and qualification programs for teachers, which leads to an improvement in the efficiency of their professional performance in their work with students. Furthermore, Kosgei (2015) stressed that identifying the training needs of teachers results in the provision of training and qualification programs that can improve the quality of education and educational services provided to students. Identifying training needs in designing targeted training programs is a complex process that is not limited to a specific individual. It requires effort from all parties involved in presenting and evaluating the educational process in special education schools.

2.6 Previous Studies

Almahrej (2020) assessed the level of training needs of LD teachers in the four domains—dyslexia, dyspraxia, dysgraphia, and dyscalculia—from the perspectives of an educational supervisor in the Kingdom of Saudi Arabia. The study tool was a 24-item questionnaire that was used to collect data from 93 educational supervisors. The findings showed that the level of training needs for LD teachers in the four domains was very high.

Aktan (2020) determined the training needs of teachers regarding inclusion students with LD in their classrooms. The study sample consisted of 20 teachers who worked in primary, secondary, and high schools in Duzce City and who had LD students in their classes. The qualitative research collected data using a semi-structured interview. The findings revealed several trainings needs that LD teachers lack. These included competence in identifying learning difficulties, applying educational diagnostic test, adjusting the curricula according to the students' needs, and developing individualized educational plans.

Alajmi et al. (2020) identified the level of educational competencies and training needs of inclusion teachers who teach slow learners in Kuwait from the teachers' point of view. The sample consisted of 300 teachers who worked in inclusive classrooms. A 60-item questionnaire was developed to collect data from the participants. The findings revealed that the educational competencies that teachers possess to deal with slow learners came at the intermediate level in the domains of planning, teaching, diagnosis and assessment, and classroom management. However, other competencies represented a high level of needs for the teachers, including adapting the classroom environment, designing

appropriate tests for students, applying cooperative educational strategies, and applying behavior modification strategies.

Albluwi (2019) evaluated in-service professional training programs for LD teachers in Tabuk and identified the training needs from the teachers' point of view. The study used a 63-item questionnaire with five main domains: program management, program content, professional competencies for trainers, program objectives, and training needs for teachers. The study sample consisted of 63 LD teachers. The findings indicated that the effectiveness level of in-service professional training programs for LD teachers was within the moderate range. However, the level of training needs for LD teachers was high in several domains, including self-assessment to determine the effectiveness of teaching methods, adapting assessment tools to suit LD students, developing individual educational plans, using standards and standardized tests, using educational technology in teaching LD students, and developing and implementing transitional plans.

Chitiyo et al. (2019) identified the professional development needs of both general and special education teachers who work with students with disabilities in inclusive classrooms in Ghana. The study used a mixed method approach to investigate the questions. The study sample consisted of 232 teachers. The findings showed that teachers felt inadequately prepared to work with students with disabilities in inclusive classrooms. Almost all participants emphasized the importance of professional development. The teachers acknowledged the importance of all the topics presented to them, including the use of modern teaching methods, application of assessment and diagnosis tools, differentiation of teaching methods, application of behavior modification techniques, characteristics of students with disabilities, and the inclusion of technology in teaching students with disabilities.

Alshamare (2019) identified the nature of the necessary training needs for special education teachers working in Saudi government schools from their perspectives. A descriptive approach was applied, and a questionnaire was used to collect data from 384 teachers. The study reported that teachers had a high level of training needs in different domains, including the assessment and diagnosis process, modern trends in teaching methods, educational technology, and behavior modification. There was a moderate level of training needs in developing educational aids, individual educational programs, professional rehabilitation, transitional services, comprehensive education, and work with families of students with disabilities. The results also showed no significant differences in the participants' responses based on their gender, specialization, and region.

Anuradha et al. (2019) attempted to identify the level of skills and training needs of special education teachers and teaching support staff in functional behavioral assessment and behavioral interventions within special education from their point of view. The study sample consisted of 378 special education teachers and 38 teaching support staff members. A self-report inventory was used as a data collection tool. The findings revealed that the special education and teaching associates possessed a lower level of skills related to conducting functional

behavioral assessments than skills related to behavioral intervention. Furthermore, the special education and teaching associates mentioned that both functional behavioral assessment and behavioral intervention represented a priority area for training for them.

Hamdan (2018) explored the training needs of teachers of autism spectrum disorder students and their relationship to some variables. The study sample consisted of 73 teachers of ASD children in Amman. The researcher developed a 48-item scale that consisted of two domains: theoretical training needs and practical training needs. The results showed that teachers have a moderate level of training needs in different domains, including assessing the effectiveness of individual educational programs, organizing the classroom environment, developing educational reports, applying assessment tools and lesson planning, using educational aids, and managing the classroom environment. There were no significant differences in teachers' training needs based on their teaching experience and academic qualifications.

Almaamaria and Altaj (2017) investigated the training needs of special education teachers and their relationship to certain variables. The study surveyed the opinions of 115 teachers working in schools in the Alburaimi Governorate, Sultanate of Oman. The findings revealed a high level of training need for special education teachers in the domain of employing technology and educational techniques, followed by lesson planning, and implementing the educational process domain. Both measurement and diagnosis and communication domains came in the third rank, followed by the behavior modification domain, and theoretical knowledge in education came in the last rank. Furthermore, there were no significant differences in the training needs of the study sample according to their gender, academic qualifications, years of experience, and the type of disability of the students being taught. The authors recommended reconsidering special education teachers' preparation and training programs and holding workshops that suit teachers' needs.

Hughes et al. (2016) explored the professional development needs of both general and special education teachers in northern Malawi. The study sample consisted of 300 teachers working with learners with special needs. A semi-structured questionnaire with open- and closed-ended questions was used to collect data for the study. The findings indicate that the teachers were in favor of inclusive education and acknowledged a high need for special education professional development programs. The teachers also pointed to training and resources for working with sensory disabilities as a high priority.

Abuhusain and Abdulrahman (2016) aimed to explore the essential training needs of LD teachers and LD supervisors from their point of view. The study sample consisted of 50 teachers and supervisors who worked in a middle school. A 29-item survey was used to collect the data. The study findings revealed an intermediate level for the training needs of both teachers and supervisors in the domains of developing and implementing transitional plans for LD students, applying diagnostic tests, knowledge of the characteristics of LD learners, comprehensive and accurate descriptions of the strengths and needs of learners, and applying informal tests. However, there were no significant statistical

differences in the teachers' and supervisors' training needs based on the nature of the work (supervisor/teacher), academic qualification, years of experience, and the number of training courses.

Alsaree (2016) identified the most important training needs of teachers who worked with students with mild intellectual disabilities in public schools in Jordan from their point of view. The sample of this study consisted of 50 LD teachers. A 20-item questionnaire was used to collect the data. The results indicated that the most important training needs for teachers include organizing appropriate educational environments, identifying behavioral modification strategies, applying assessment and educational diagnoses, and developing transition plans for students with disabilities. There were no significant differences in the teachers' responses based on gender. Other training needs were estimated as less important needs (medium), such as preparing individualized educational plans, writing daily reports about learners' performances, and providing psychological support to students' families. The results also showed that there were no statistically significant differences in training needs according to the gender of the participants.

Alayed and Alayed (2015) identified the training needs of special education teachers in the Majmah Governorate. The study tool was a 30-item questionnaire. The study sample consisted of 66 teachers. The results showed that teachers acknowledged their need for efficient training in different domains, including assessment, lesson planning, and communication skills. There were, however, no differences in the training needs according to the teachers' specialization, gender, and years of experience.

Some of the previous study focused on assessing level of training needs of LD teachers on specific domains (Albluwi, 2019; Almahrej, 2020). Other studies have concentrated on assessing the training needs of teachers who are working in specific educational environment, inclusive classrooms (Aktan, 2020; Alajmi et al., 2020). Alayed and Alayed (2015), Almaamaria and Altaj (2017), Alshamare (2019) and Anuradha et al. (2019), assessed the training need of special education teachers in general without classifying their specialty while Hughes et al. (2016) and Chitiyo et al. (2019) focused on the training needs of both special education and general education teachers. Differently, the current study focused on investigating the extent and areas of training needs of LD teachers who are only working on programs that have been established for LD students.

3. Problem Statement

The increased number of students enrolled in learning disabilities programs in the Kingdom of Saudi Arabia has called for the need to pay attention to the qualitative and quantitative development of those programs.

Therefore, it is without question that any development process directed at these programs must first begin with an adequate professional preparation for LD teachers, as it is one of the essential elements that contribute to the success of the educational process. In that context, Almahrej (2020) stressed the need to prepare human cadres at a high level of qualification and training to meet the educational and behavioral needs of LD students in resource rooms. In addition,

he emphasized the need to keep pace with contemporary educational trends while working with LD students, especially in terms of the use of educational technology, evidence-based practices (EBPs), assessment and diagnosis issues, and the response to the intervention (RTI) model (Alsubaie, 2014).

The rapid developments in the field of LD also have imposed teachers to learn new skills and competencies to keep pace with changes at the scientific and technical levels. Together, these development and changes make the process of providing LD teachers with a unique type of in-service professional training an urgent necessity that cannot be overlooked (Albluwi, 2019; Alsubaie, 2014).

Even though professional training is an urgent necessity, it must not be randomly built, but rather according to the actual training needs of LD teachers. Almahrej (2020) confirmed that this professional training must be based on the real needs of LD teachers to help them raise the level of educational outcomes for their students. Therefore, identifying training needs is the core of any successful training program's planning and implementation process (Abuhusain & Abdulrahman, 2016). Any process targeting the improvement of a professional development of LD teachers must be established based on the assessment of training needs of teachers. Doing that will contribute to designing and implementing suitable training programs emanating from those needs. That confirms what was stated in Article 34 of the Civil Service Law issued under Decree No. 49 on 1/1/1900 AH, which stipulates the need to provide training programs for all holders of educational jobs according to their actual training needs to improve their skills and professional performances.

Therefore, many studies, including Albluwi (2019), Alshamare (2019), and Chitiyo at al. (2019), highlighted the importance of identifying the training needs of LD teachers to develop training and qualification programs according to those needs. Further, Rosenberg and Walther-Thomas (2014) argued for the ongoing in-service identification of the needs of teachers working with LD students to train them on all new developments in their field of specialization. Thus, any training program that is not built based on evaluating the training needs of teachers cannot lead to an upgraded level of their professional performance. It will be no more than a waste of the time and effort of the authorities in charge (Alsubaie, 2014).

When talking about Saudi Arabia in particular, great attention has been given to assess the effectiveness of the existing training programs that have been provided for learning disabilities teachers (Albluwi, 2019; Altabeeb et al., 2020; Bakhsh, 2009). However, thus far, not much is discovered about the extent and areas of training needs of learning disabilities teachers from their perspectives. In addition, despite the paramount importance of identifying the training needs of human cadres working with LD students to adequately develop training and development programs for them, many of the programs offered to LD teachers do not necessarily reflect the actual their training needs(Almahrej, 2020; Alshamare, 2019; Chitiyo et al., 2019). Alsubaie (2014) indicated that there are some gaps in the professional training systems targeting LD teachers which require to be more considered and carefully planned. The shortcomings of identifying the training needs of LD teachers are considered one of the most

serious problems that negatively impact the successful planning and implementation of the professional development programs (Albluwi, 2019).

Further, the researcher's work on learning disabilities and constant communication with LD teachers for many years revealed that many LD teachers criticize the training programs offered to them. They claim that these programs still follow the traditional methods of training and ignore the actual teachers training needs. Some LD teachers also stated that their professional training was confined to theoretical instead of the practical aspects. This is consistent with Alshamare's (2019) findings that confirm that the quality of professional development for LD teachers in the KSA falls below the expected level, as its training programs are traditional and far from the real training needs of teachers. Alkhateeb (2015) added that the professional training programs offered to LD teachers direct most of their attention to theoretical aspects and neglect important practical aspects. Therefore, further studies are needed on the extent and areas of training needs of learning disabilities teachers from their perspectives. That will contribute enrich the literature and gain better understanding of the extent and areas of training needs of LD teachers. Moreover, it will assist in providing efficient training programs that are built based on the actual training needs of LD teachers.

4. Purpose of the Study

The purpose of the current study was to identify the extent and areas of LD teachers' training needs based on their perspectives. It also sought to examine the influence of some demographic variables on the extent of training needs for LD teachers.

Significance

The current study's findings contribute to filling the existing gap and enriching the special education literature with important information about the extent and nature of the training needs of LD teachers, considering the preliminary local studies addressing the topic. As far as the researcher knows, no Saudi study has investigated the problem under study. Moreover, this study attempts to provide feedback to those in charge of professional development programs on the reality of the training programs currently offered to LD teachers and the extent to which they meet their needs. The results of this study contribute to reducing the amount of waste resulting from the inappropriate training programs currently offered, which do not meet the needs of LD teachers. The findings of this study could draw the attention of those who work in the professional development authorities affiliated with the Ministry of Education to the importance of providing training (before and during service) for LD teachers, which may enhance their efficiency and develop their professional skills.

This study also intends to draw the attention of the supervisors of the LD teachers' training programs to the importance of following up, evaluating, and developing these programs on an ongoing basis to align with the needs of the teachers. The current study's findings are also expected to provide training centers concerned with developing and implementing training packages with information about the priority training needs of LD teachers. This will assist in

creating high-efficiency professional training programs based on the identified training needs for LD teachers and may also act as the foundation for similar studies. The researcher argues that the interest in qualifying teachers professionally according to their real needs reflects the extent of the sense of responsibility toward the future of LD and the keenness to provide them with appropriate services. Moreover, the researcher hopes to provide the Arabic literature with a self-devised standardized scale to assess the extent of training needs of LD teachers from their point of view.

6. Methodology

This section provides an explanation of the study design, questions and hypotheses, variables, participants and sampling, data collection instrument and procedure, and data analysis that have been used to investigate the problem under study.

6.1 Study Design

To achieve the study's purpose and answer its questions, a descriptive non-experimental quantitative method with a survey design was adopted to collect relevant information.

6.2 Study Questions and Hypotheses

The following questions and hypotheses were formulated for this study:

RQ1: What is the extent of training needs of LD teachers from their perspectives?

RQ2: What are the areas of training needs of LD teachers?

RQ3: Are there significant differences in the extent of training needs of LD teachers based on their gender, highest degree earned, and years of teaching experience?

H1: There is significant difference in the extent of training needs of LD teachers based on their gender.

H2: There is significant difference in the extent of training needs of LD teachers based on their highest degree earned.

H3: There is significant difference in the extent of training needs of LD teachers based on teachers' teaching experience.

6.3 Study Variables

This study involved four variables as following:

6.3.1 Dependent variable

The extent of training needs of LD teachers working in LD programs at public schools from their perspectives.

6.3.2 Independent variables

Gender. This study included teachers of both genders (male/female).

Highest degree earned. This study included LD teachers who held bachelor's and master's degrees.

Number of years of teaching experience. This study included LD teachers with teaching experience ranging from between <5 and 11 years.

6.4 Study Participants and Sampling

The total population size of this study was 1300 LD teachers while the participants consisted of 432 LD teachers working in learning disabilities programs at public schools in Riyadh during the 2022 academic year. Due to the large size of the population and difficulty to reach them, participants were selected using the simple random sampling method. Table 1 shows the distribution of the respondents according to their demographic information.

Variable	Category	Frequency	Percentage
Gender	Male	166	38.4
	Female	266	61.6
Highest degree	Bachelor's degree	238	55.1
earned	Master's degree	194	44.9
Years of teaching	Less than 5 years	124	28.7
experience of	From 5 to 10 years	238	55.1
students with LD	11 years or more	70	16.2
	Total	432	100.0

Table 1: Demographics of the respondents

Table 1 shows that most of the respondents were females (61.6%). Concerning the highest degree held, 238 respondents (55.1%) had a bachelor's degree and 194 had a master's degree (44.9%). Regarding teaching experience of students with LD, 28.7% of respondents had been teaching for less than 5 years, whereas 238 respondents (55.1%) had taught for 5 to 10 years. Only 70 respondents (16.2%) had been teaching for 11 years or more.

6.5 Data Collecting instrument and Procedures

As a data collection instrument, a questionnaire of 42 items was developed for this study. The survey aimed to explore the extent and areas of LD teachers' training needs based on their perspectives. It was designed to assess the extent and specific areas of training for teacher professional development programs. The researcher built the survey after comprehensively reviewing the relevant literature by Alayed and Alayed (2015), Arafa (2015), and Abuhusain and Abdulrahman (2016) and by relying on her knowledge of the standards required for LD teachers, as approved by the National Centre for Assessment and Evaluation in the KSA (2017).

The questionnaire consisted of two sections. The first section included questions on the respondents regarding gender, highest degree earned, and years of teaching experience, while the second section included 42 items, all of which aimed to reveal the extent and area of the training needs of LD teachers. The participants were asked to respond using a 5-point Likert scale (no need-, few-, moderate-, high-, extremely high).

Four techniques were utilized to ascertain the psychometric properties of the questionnaire in this study:

Content validity. The first draft of the questionnaire was sent to eight special education experts, who held a doctoral degree in special education, to examine the items' clarity and their relationship to the purpose of the study. All the experts' observations were considered while developing the final draft of the questionnaire.

Internal consistency validity. Validity was calculated using internal consistency by calculating the correlation coefficient (Pearson correlation coefficient) for each item of the questionnaire, as shown in Table 2.

Table 2: Correlation coefficient results

N	Correlations	sig	N	Correlations	sig
1	.685**	0.000	22	.476**	0.008
2	.446*	0.014	23	.563**	0.001
3	.583**	0.001	24	.657**	0.000
4	.578**	0.001	25	.538**	0.002
5	.436*	0.016	26	.522**	0.003
6	.483**	0.007	27	.574**	0.001
7	.525**	0.003	28	.591**	0.001
8	.541**	0.002	29	.706**	0.000
9	.420*	0.021	30	.673**	0.000
10	.552**	0.002	31	.503**	0.005
11	.407*	0.026	32	.407*	0.026
12	.414*	0.023	33	.380*	0.038
13	.433*	0.017	34	.372*	0.043
14	.387*	0.034	35	.544**	0.002
15	.478**	0.008	36	.402*	0.028
16	.391*	0.033	37	.499**	0.005
17	.563**	0.001	38	.489**	0.006
18	.510**	0.004	39	.655**	0.000
19	.498**	0.005	40	.562**	0.001
20	.448*	0.013	41	.726**	0.000
21	.433*	0.017	42	.686**	0.000

Table 2 shows that all the correlation coefficients were statistically significant, indicating that the questionnaire items were valid and homogenous. According to Table 6, internal consistency validity tended to be good.

Cronbach's alpha coefficient and split-half method. The results are shown in Table 3.

Table 3: Values of the reliability coefficient of the questionnaire

Reliability of the	Cronbach's alpha	Split-half
Questionnaire	0.931	0.854-0.890

Table 3 shows that all values of the reliability coefficients, the alpha and the split-half value were greater than 0.70, indicating high reliability and thus suitability for use.

Google Forms were used to draft and administer both the consent form and the questionnaire for data collection after obtaining permission from the university authorities (Appendix 1). The researcher chose to electronically deliver the questionnaire to the participants through the general administration of education in Riyadh to save the cost, time, and energy of commuting during school and work time. The data collection phase lasted three months, from January 2022 to March 2022.

6.6 Data Analysis

Different statistical techniques—percentages, frequency, means, standard deviation, three-way ANOVA, and Scheffe's test for multiple comparisons—were used to examine the study variables. Specifically, to describe the data from demographic factors, percentages, and frequencies were used. Means and standard deviations were used to assess the extent of training needs of LD teachers. The influence of demographic factors on the extent of training needs for LD teachers was examined using mean, standard deviation, three-way ANOVA, and Scheffe's test for multiple comparisons. The study hypotheses were tested at a 0.05 level of significance. The following method was utilized to determine the extent of LD teachers' training needs:

Once the data were encoded, the length of the cells for the 5-point scale (lower and upper limits) was determined by calculating the range (5 - 1 = 4) and then dividing it by the number of scale cells to get the correct cell length (4/5 = 0.80). This value was added to the lowest value in the scale (or the beginning of the scale, which is whole 1) to determine the upper bound for this cell; thus, the length of the cells was as follows:

- 1-1.80 represents the *no need* response to each phrase.
- 1.81–2.60 represents the *low* response to each phrase.
- 2.61–3.40 represents the *moderate* response to each phrase.
- 3.41-4.20 represents the *high need* response to each phrase.
- 4.21–5.00 represents the *very high* response to each phrase.

7. Results

7.1 Q1-2: The extent and areas of training needs of LD teachers from their perspectives.

Table 4: Means and standard deviations of the extent of training needs of LD teachers

Items				
itens	Mean	Std. Deviation	Ranking	Extent
2. The extent of training that I need in evaluating the effectiveness of individual educational programs for students with learning disabilities.		1.12	1	Moderate
42. The extent of training that I need in applying cooperative learning strategies with students with learning disabilities.		1.17	2	Moderate
1. The extent of training that I need in designing and implementing individual educational programs for students with learning disabilities.		1.03	3	Moderate
12. The extent of training that I need in essential skills to work with multidisciplinary team members (e.g., effective communication, time management, planning, active listening, collaboration, and problem solving).		1.21	4	Moderate
8. The extent of training that I need in recognizing the different characteristics of students with learning disabilities.		1.13	5	Moderate
20. The extent of training that I need in analyzing assessment results to make decisions and provide recommendations for students with learning disabilities.		1.21	6	Moderate
18. The extent of training that I need in discussing students' performance reports with parents and involving them in procedures that serve students with learning disabilities.		1.22	7	Moderate
28. The extent of training that I need in professional counseling skills to guide students with learning disabilities according to their abilities and tendencies.		1.20	8	Moderate
31. The extent of training that I need in adapting curricula (deleting/ adding/ modifying) to make it more suitable for students with learning disabilities.	2.82	1.22	9	Moderate
15. The extent of training that I need in using educational technologies to teach students with learning disabilities.	2.82	1.20	9	Moderate
9. The extent of training that I need in using appropriate diagnostic tests for students with learning disabilities.	2.82	1.16	9	Moderate
4. The extent of training that I need in applying the principles of UDL with students.	2.81	1.13	12	Moderate
34. The extent of training that I need in evaluating transitional plans in collaboration with IEP team members.		1.26	12	Moderate
10. The extent of training that I need in developing behavior modification plans for students with learning disabilities.		1.19	14	Moderate

		1		1 1
6. The extent of training that I need in using educational	2.80	1.17	14	Moderate
assessment methods for students with learning				
disabilities.				
3. The extent of training that I need in using the Response	2.80	1.07	14	Moderate
to Intervention (RTI) tool with students with learning				
disabilities.				
27. The extent of training that I need in using evidence-	2.79	1.16	17	Moderate
based practices in teaching students with learning				
disabilities.				
26. The extent of training that I need in using modern	2.78	1.20	18	Moderate
technology to assess students with learning disabilities.				
5. The extent of training that I need in developing	2.78	1.12	18	Moderate
appropriate teaching aids for students with learning	2.70	1,12	10	Moderate
disabilities.				
	2.70	1 22	10	Madauata
41. The extent of training that I need in applying self-	2.78	1.22	18	Moderate
assessment methods to students with learning				
disabilities.				
39. The extent of training that I need in effectively using	2.77	1.21	21	Moderate
task analysis strategies.				
19. The extent of training that I need in framing SMART	2.77	1.17	21	Moderate
learning objectives.				
29. The extent of training that I need in involving parents	2.74	1.21	23	Moderate
of students with learning disabilities in various activities.				
32. The extent of training that I need in adapting	2.74	1.20	23	Moderate
assignments and tests to suit the abilities of students with	1	1.20		1,10 0,010,00
learning disabilities.				
7. The extent of training that I need in developing	2.73	1.17	24	Moderate
extracurricular activities for students with learning	2.73	1.17	4	Moderate
disabilities.				
	0.70	1 10	0.4	N
17. The extent of training that I need in managing	2.73	1.19	24	Moderate
classrooms while working with students with learning				
disabilities.				
11. The extent of training that I need in evaluating the	2.73	1.20	24	Moderate
effectiveness of behavior modification plans for students				
with learning disabilities.				
23. The extent of training that I need in motivating	2.73	1.17	24	Moderate
students with learning disabilities to learn.				
16. The extent of training that I need in conducting	2.72	1.22	28	Moderate
scientific research in the field of learning disabilities.				
22. The extent of training that I need in arranging the	2.72	1.23	28	Moderate
classroom environment to suit the characteristics of		1.20		1,10 0,010,00
students with learning disabilities.				
33. The extent of training that I need in designing	2.71	1.19	30	Moderate
transitional plans for students with learning disabilities.	∠./ 1	1.19	30	wiouerate
	0.71	1.01	20	2.6.1.4
24. The extent of training that I need in accurately	2.71	1.21	30	Moderate
describing the strengths and weaknesses of students with				
learning disabilities.				
30. The extent of training that I need in developing	2.71	1.15	30	Moderate
educational activities to suit the needs of students with				
learning disabilities.				
14. The extent of training that I need in self-evaluation	2.70	1.17	33	Moderate
skills.				
				-

13. The extent of training that I need in methods of professional self-development.	2.70	1.16	33	Moderate
25. The extent of training that I need in helping students with learning disabilities acquire different test-taking strategies		1.27	33	Moderate
36. The extent of training that I need in strategies for activating prior knowledge for students with learning disabilities.	2.69	1.14	36	Moderate
38. The extent of training that I need in the methods of communication with the local community and in educating its members about learning disabilities.		1.22	36	Moderate
21. The extent of training that I need in differentiated instruction for students with learning disabilities.	2.68	1.19	38	Moderate
37. The extent of training that I need in developing the creative skills of students with learning disabilities while teaching them.	2.66	1.21	39	Moderate
40. The extent of training that I need in developing rating scales to have better idea problems facing students with learning disabilities.	2.65	1.23	40	Moderate
35. The extent of training that I need in helping students with learning disabilities acquire problem-solving skills.	2.59	1.23	41	Low
Overall mean score	2.78	0.58	-	Moderate

As shown in Table 4, respondents identified all items, except for item 35, with a "moderate" training need (arranged from largest to smallest degree). The mean scores ranged from 2.65 to 3.11, falling within the third category of the 5-point scale (2.61–3.40). The respondents described their training needs regarding helping their students with learning disabilities acquire problem-solving skills as having a low significance (mean = 2.59), falling within the second category of the 5-point scale (1.81 to 2.60). The overall mean score for the questionnaire was 2.78, which was within the third category of the 5-point scale (2.61 to 3.41). This indicates that all the questionnaire items were considered as "moderate" extent of training needs of LD teachers, except item 35, which most respondents indicated as a "low" extent of training need. As shown in Table 4 most of the questionnaire items represents moderate training needs for LD teachers.

The areas of the LD teachers' training needs varied. They included, but were not limited to, developing individualized educational plans, knowing the characteristics of students with learning disabilities, conducting assessment and diagnostic tests, using educational technology, developing transition plans, using research-based strategies, conducting behavioral modification techniques, using appropriate teaching aids, and arranging the classroom environment.

7.2 Q3: Differences in the extent of training needs of LD teachers based on their gender, highest degree earned, and years of teaching experience.

To answer the second research question, the means and standard deviations of the extent of training needs of LD teachers were extracted according to the variables gender, highest degree earned, and years of teaching experience, as shown in Table 5.

Table 5: Means and standard deviations of the extent of training needs of LD teachers according to the study's variables

Variables	Category	Means	Standard deviations
Gender	Male	3.00	0.56
Gender	Female	2.65	0.54
III ah aat da awaa aawaa d	Bachelor's degree	2.84	0.60
Highest degree earned	Master's degree	2.72	0.54
	Less than 5 years	2.90	0.63
Years of teaching experience	From 5 to 10 years	2.72	0.55
	From 11 years or	2.78	0.52
	more	2.76	0.32

Table 5 shows an apparent variance in the means and standard deviations of the extent of training needs of LD teachers according to the study's variables. A triple analysis of variance was conducted to assess the significance of the statistical differences between the arithmetic means, as shown in Table 6.

Table 6: Three-way ANOVA results

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	11.979	1	11.979	40.435	.000
Highest degree earned	2.345	1	2.345	7.916	.005
Years of teaching experience	2.201	2	1.100	3.714	.025
Error	126.500	427	.296		
Total	3489.569	432			
Corrected Total	142.862	431			

According to Table 6, there was a statistically significant difference in the extent of training needs based on the gender in favor of male, indicating that male teachers have more training needs than female teachers. There was a statistically significant difference in the extent of training needs based on the highest degree earned in favor of a bachelor's degree, indicating that teachers who had a bachelor's degree had more training needs than teachers with a master's degree.

Table 6 also shows statistically significant differences in the extent of LD teachers' training needs according to years of teaching experience. Scheffe's test for multiple comparisons was conducted to determine the direction of the statistical difference (Table 7).

Table 7: Scheffe's test for multiple comparisons

Years of experience	Less than 5 years M = 2.90	From 5 to 10 years M = 2.72	From 11 years or more M = 2.78
Less than 5 years	-		
From 5 to 10 years	0.017*	-	
From 11 years or more	0.341	0.770	-

As indicated in Table 7, there were statistically significant differences in the LD teachers' extent of training needs among teachers who had been teaching for "less than 5 years" and teachers who have been teaching for "5–10 years" in favor of "less than 5 years." This confirms that LD teachers with teaching experience of less than 5 years had more training needs.

8. Discussion

The aim of this study was to identify the extent and areas of LD teachers' training needs based on their perspectives. It also sought to examine the influence of different demographic variables on the extent of training needs for teachers of students with learning disabilities to help them receive priority in achieving sustainable professional development that will improve their skills and knowledge in teaching LDs.

8.1 The extent and areas of training needs of LD teachers from their perspectives

The extent of the training needs in the sample studied was moderate on all items of the questionnaire except for item 35, "the extent of training that I need in helping students with learning disabilities acquire problem-solving skills," which was low. This result is consistent with those of studies by Abuhusain and Abdulrahman (2016) and Hamdan (2018) who found that the level of training needs for teachers was moderate. However, the result is contrary to those of Hughes et al. (2016), Almaamaria, and Altaj (2017), Albluwi (2019), Alshamare (2019) and Almahrej (2020), who indicated a high level of training needs for the teachers.

Based on the results, the areas of the LD teachers' training needs varied. They included, but were not limited to, developing individualized educational plans, knowing the characteristics of students with learning disabilities, conducting assessment and diagnostic tests, using educational technology, developing transition plans, using research-based strategies, conducting behavioral modification techniques, using appropriate teaching aids, and arranging the classroom environment. These findings are generally in agreement with those of previous studies conducted by Abuhusain and Abdulrahman (2016), Alsaree (2016), Hamdan (2018), Albluwi (2019), Alshamare (2019), Chitiyo et al. (2019), Aktan (2020), and Alajmi et al. (2020). The identified training needs emphasize the importance of reconsidering LD teacher preparation and training programs to provide teachers with workshops that suit their real needs (Almaamaria & Altaj, 2017). Alsubaie (2014) highlighted that a teacher training program that is not based on the evaluation of training needs cannot lead to an upgraded professional level. Instead, it will be no more than a waste of the time and effort of the educational agencies implementing the program.

8.2 Differences in the extent of training needs of LD teachers based on their gender, highest degree earned, and years of teaching experience

According to the results, there were statistically significant differences at the significance level of 0.05 in the extent of training needs of LD teachers based on their gender, highest degree earned, and years of teaching experience. Male LD teachers indicated more training needs than did female teachers. Furthermore,

teachers with bachelor's degrees acknowledged the need for more training than those with master's degrees, and LD teachers with teaching experience of less than five years indicated more training needs than teachers who had more years of teaching experience. In other words, the finding of this study emphasized that an adequate level of training should be provided to male teacher who have a bachelor's degree with less than five years of teaching experiences. That result disagreed with prior studies (Abuhusain & Abdulrahman, 2016; Alayed & Alayed, 2015; Almaamaria & Altaj, 2017; Alshamare, 2019; Hamdan, 2018), showing no statistically significant differences in the extent of training needs of LD teachers based on their gender, highest degree earned, and years of teaching experience. Therefore, the researcher concluded that the three study hypotheses were accepted.

9. Conclusion

The results of this study revealed that the extent of training needs of LD teachers was moderate. Nevertheless, the study results show that the training needs of LD teachers included, but were not limited to, developing individualized educational plans, using evidence-based strategies, conducting assessment and diagnostic tests, using educational technology, framing SMART learning objectives, and designing transition plans. The areas of training needs identified in this study are calls to reconsider the current training programs and workshops designed for LD teachers. This suggests that the preparation of teacher training programs should be based on the evaluation of their training needs instead of using the traditional method, which disregards the evaluation of training needs. This study also showed that there are statistically significant differences in the degree of teachers' training needs based on their gender, qualification, and years of teaching experience. However, future studies are needed to clarify the impact of these and other variables on the needs for the training of LD teachers.

10. Recommendations

Based on the findings, the following are recommended as implications and opportunities for future research:

- 1. School districts and principals are encouraged to provide LD teachers with material and moral incentives to encourage them to attend workshops and training programs to develop their professional skills.
- 2. A similar study should be conducted in other cities and governorates within the KSA for broader analysis and greater generalizability.
- 3. Further studies may be conducted to identify the extent of LD teachers' training needs from the point of view of educational supervisors and principals.
- 4. School districts are encouraged to develop various mechanisms to continuously detect the training needs of LD teachers to provide them with needs-based training programs.

- 5. Teachers' professional development programs and agencies are encouraged to provide ongoing training for LD teachers, stemming from the training needs identified in this study.
- 6. Further studies are needed to examine the influence of other variables, such as the grade level being taught and the number of workshops that have been attended in the field of LD.

11. Limitations

In this study, where the extent of LD teachers' training needs is discovered based on their perspective, the results found by the quantitative approach are limited to the perspective of 432 LD teachers working in learning disabilities programs at public schools during the 2022 academic year. Moreover, all LD teachers lived and worked in Riyadh. Thus, the results cannot be generalized to other cities within the Kingdom of Saudi Arabia. The reliability of the results is also limited by the objectivity of the participants' responses.

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Appendix 1

O (*	T T				
Section	L				
Demographic information					
Gender Male () Female ()					
Highest degree earned Bachelor's degree ()	Mas	ter's deg	ree ()		
Years of teaching experience Less than 5 years ()	From 5-	10 years	() 11 yea	ars or mo	ore ()
Section I	Ί				
Questionnaire Items	Very	High	Moderate	Low	No
-	high				need
	mgn				neeu
1. The extent of training that I need in designing					
and implementing individual educational					
programs for students with learning disabilities.					
2. The extent of training that I need in evaluating					
the effectiveness of individual educational					
programs for students with learning disabilities. 3. The extent of training that I need in using the					
Response to Intervention (RTI) model with students					
with learning disabilities.					
4. The extent of training that I need in applying the					
principles of UDL with students.					
5. The extent of training that I need in developing					
appropriate teaching aids for students with					
learning disabilities.					
6. The extent of training that I need in using					
educational assessment methods for students with					
learning disabilities.					
7. The extent of training that I need in developing					
extracurricular activities for students with learning disabilities.					
8. The extent of training that I need in recognizing					
the different characteristics of students with					
learning disabilities.					
9. The extent of training that I need in using					
appropriate diagnostic tests for students with					
learning disabilities.					
10. The extent of training that I need in developing					
behavioral modification plans for students with					
learning disabilities.					
11. The extent of training that I need in evaluating					
the effectiveness of behavioral modification plans		1	1	1	ı

for students with learning disabilities.	
Tot stadents with rearring disabilities.	
12. The extent of training that I need in essential	
skills to work within multidisciplinary team	
members (e.g., effective communication, time	
management, planning, active listening,	
collaboration, and problem solving).	
13. The extent of training that I need in methods of	
professional self-development.	
14. The extent of training that I need in self-	
evaluation skills.	
15. The extent of training that I need in using	
educational technologies to teach students with	
learning disabilities.	
16. The extent of training that I need in conducting	
scientific research in the field of learning	
disabilities.	
17. The extent of training that I need in managing	
while working with students with learning	
disabilities.	
18. The extent of training that I need in discussing	
students' performance reports with parents and	
involving them regarding procedures that serve	
students with learning disabilities.	
19. The extent of training that I need in framing	
SMART learning objectives.	
20. The extent of training that I need in analysing	
assessment results to make decisions and provide	
recommendations for students with learning disabilities.	
21. The extent of training that I need in differentiating instruction for students with	
learning disabilities.	
22. The extent of training that I need in arranging	
the classroom environment to suit the	
characteristics of students with learning disabilities.	
23. The extent of training that I need in motivating	
students with learning disabilities to learn.	
24. The extent of training that I need in accurately	
describing the strengths and weaknesses of	
students with learning disabilities.	
25. The extent of training that I need in helping	
students with learning disabilities acquire different	
test-taking strategies	
26. The extent of training that I need in using	
modern technology to assess students with learning	
disabilities.	
27. The extent of training that I need in using	
evidence-based practices in teaching students with	
learning disabilities.	
28. The extent of training that I need in professional	
counselling skills to guide students with learning	
disabilities according to their abilities and	

tendencies.		
29. The extent of training that I need in involving		
parents of students with learning disabilities in		
various activities.		
30. The extent of training that I need in developing		
educational activities to suit the needs of students		
with learning disabilities.		
31. The extent of training that I need in adapting		
curricula (deleting/ adding/ modifying) to make it		
more suitable for students with learning		
disabilities.		
32. The extent of training that I need in adapting		
assignments and tests to suit the abilities of		
students with learning disabilities.		
33. The extent of training that I need in designing		
transitional plans for students with learning		
disabilities.		
34. The extent of training that I need in evaluating		
transitional plans in collaboration with IEP team		
members.		
35. The extent of training that I need in helping		
students with learning disabilities acquire problem-		
solving skills.		
36. The extent of training that I need in strategies		
for activating prior knowledge for students with		
learning disabilities.		
37. The extent of training that I need in developing		
the creative skills of students with learning		
disabilities while teaching them.		
38. The extent of training that I need in the methods		
of communication with the local community and in		
educating its members about learning disabilities.		
39. The extent of training that I need in effectively		
using task analysis strategies.		
40. The extent of training that I need in developing		
rating scales to have better idea problems facing		
students with learning disabilities.		
41. The extent of training that I need in applying		
self-assessment methods to students with learning		
disabilities.		
42. The extent of training that I need in applying		
cooperative learning strategies with students with		
learning disabilities.		