



Research Paper

The using of Psychosocial Development Strategy from the Point view of the Teachers of Students with Learning Disabilities and the Obstacles to their use

Dr. Khaled Yousef Asi

Associate Professor in Special Education Imam Muhammad bin Saud Islamic University, Saudi Arabia

Ghadah Abdul Aziz Al Ghamdi

Researcher in the Field of Learning Disabilities Saudi Arabia

Abstract

The present study aimed to identify the extent the using of psychological processes development strategy by teachers of learning disabilities and the differences in their use according to the variables of the scientific qualification, the years of service, the number of training courses and the obstacles to their use. The study sample consisted of (329) teachers who were selected in the simple random way from the teachers of the learning disabilities programs working in the public schools of the Department of Education in Riyadh. The data was collected by questionnaire after verifying its reliability and reliability. The results showed that the reality of using the psychological processes development strategy processes from learning difficulties teachers point of view came to a medium extent on the instruments a whole and its three fields (attention, perception, memory). The results showed that there were statistically significant differences in the degree of the use of psychological development strategy from learning disabilities teachers point of view in the total score due to the effect of variable years of service and the number of training courses. The differences in favor of the category of years of service were more than 10 years and more than 5 courses. While there were no differences due to the variable of scientific qualification. The results showed that there are 12 handicaps that prevent the use of the parameters of students with learning disabilities in the strategy of developing psychological processes.

Keywords: psychosocial Development Strategy, Teachers, Students with Learning Disabilities, Constraints.

Received 05 Jan., 2025; Revised 14 Jan., 2025; Accepted 16 Jan., 2025 © The author(s) 2025.

Published with open access at www.questjournals.org

I. Introduction

The field of learning disabilities is a specialized area within special education that has experienced significant growth and increased attention in recent years. This field has garnered interest from specialists worldwide. Samuel Kirk was the first to introduce the term "learning disabilities," highlighting a group of students who face challenges in acquiring language and educational skills through conventional teaching methods. These students are neither mentally disabled nor affected by visual or hearing impairments that could hinder their ability to learn language or other subjects. However, they exhibit difficulties in areas such as listening, thinking, reading, writing, spelling, and solving mathematical problems (Al-Khatib, 2013, p. 29).

The organizational rules for special education institutes and programs in the Kingdom of Saudi Arabia (1437) define learning difficulties as: "A disorder in one or more of the basic psychological processes involved in understanding and using written or spoken language. These difficulties manifest in disorders related to listening, thinking, speaking, reading, writing (dictation, written expression, handwriting), and mathematics. They are not attributed to causes such as mental, hearing, or visual disabilities, other forms of impairment, learning conditions, or familial care."

The teacher is the cornerstone of the educational process and bears the primary responsibility for its success and the achievement of its goals. Therefore, special education teachers, including those specializing in learning difficulties, must continually evaluate and refine the teaching strategies they employ to instruct and train individuals with learning difficulties. Adopting optimal teaching strategies enhances their professional performance and effectiveness in imparting various skills to students with learning difficulties. Teachers of

students with learning difficulties play a vital role in the educational process as they are the primary planners and implementers of individualized education plans. They also guide students through the teaching and learning process, monitor their academic progress, and work toward improving and advancing their performance levels.

In this context, the National Center for Assessment and Evaluation under the King Abdullah Project for the Development of Learning (2013, pp. 6–16) outlined several criteria for teachers of students with learning difficulties. These include providing opportunities to teach and enhance the learning of students with learning difficulties, understanding various teaching methods and strategies, and diversifying these approaches based on individual differences, types of difficulties, and students' learning styles. Al-Qurashi (2012) emphasized that the role of a learning difficulties teacher in the educational process requires proficiency in modern teaching methods and strategies tailored to the unique needs of each student with learning difficulties. Additionally, teachers must address fundamental psychological processes, such as attention, perception, and memory, to enable students to acquire academic, social, and developmental skills effectively.

Locally, the Kingdom of Saudi Arabia, through the General Administration of Special Education (2002), has emphasized the importance of addressing the needs of various categories within special education, including students with learning difficulties. The General Administration, in its organizational rules for special education institutes and programs under the Ministry of Education, highlighted the necessity of providing comprehensive and individualized educational plans. These plans incorporate the most effective teaching strategies tailored to the abilities and needs of students with disabilities, including those with learning difficulties, to help them overcome their challenges.

Ibrahim (2010) posited that teaching strategies for students with learning difficulties should focus on information processing, retrieval, and independent thinking, enabling students to process and retrieve information while fostering logical, sound, and independent reasoning. Similarly, Al-Zahir (2008) and Al-Waqfi (2009) affirmed that learning difficulties among students often stem from deficiencies in basic psychological processes, including attention, perception, and memory. Al-Kilani and Al-Rusan (2012) emphasized that teaching students with learning difficulties necessitates an integrated approach involving diverse strategies, such as the strategy for developing psychological processes.

Al-Qasim (2000) identified the strategy of developing psychological processes as a set of activities aimed at training fundamental psychological processes—attention, perception, and memory—while addressing visual, auditory, and motor cognitive disorders. These processes are critical for all forms of learning and focus on improving skills such as spatial body positioning, balance, body perception, and the recognition of shapes and directions. Hallahan, Kaufman, Lloyd, and Weiss (2007) underscored the significance of this strategy in fostering voluntary attention in educational settings, particularly in classroom scenarios, where students' attention is directed toward the targeted activity while filtering out distractions.

Psychological processes, in general, are reactions to external stimuli, involving the interpretation and explanation of these stimuli to assign them meaning and significance. Learning difficulties often arise in children who experience disorders in psychological processes due to their inability to interpret and make sense of environmental stimuli or to derive appropriate implications and meanings. Since cognitive development and performance primarily depend on the efficiency and integrity of cognitive functions, identifying and addressing cognitive function disorders is critical for diagnosing and treating developmental and academic learning difficulties. These difficulties are prevalent among a significant portion of school students and cannot be overlooked.

Studies, such as Al-Zayat (1998), have suggested that individual differences in perception, attention, and memory allow individuals to be classified into distinct patterns. Al-Batayneh, Al-Rashdan, Al-Sabaileh, and Al-Khatatbeh (2012) note that the field of learning difficulties encompasses a range of programs, methods, and therapeutic strategies. These include the classical treatment approach, which relies on tasks similar to the educational content that learners struggle with, functioning as a temporary solution to alleviate challenges, akin to a painkiller providing temporary relief. In contrast, the cognitive therapy approach, grounded in information processing, focuses on addressing the cognitive processes involved in acquiring, storing, and retrieving information. This approach also emphasizes understanding the patterns individuals use in processing and organizing information during learning and thinking.

This study highlights the strategy of developing psychological processes, based on the assumption that enhancing these processes can improve students' capacity to acquire academic skills, particularly among those with learning difficulties. In line with contemporary educational trends that advocate for the inclusion of students with learning difficulties in general education classrooms, it is essential to implement teaching strategies that address their specific needs. In this regard, the **No Child Left Behind Act** emphasized the importance of ensuring that students with special needs receive high-quality education through the use of tailored teaching strategies within inclusive environments (Guerra, 2015). Similarly, the 2004 American law concerning the education of individuals with disabilities underscored the necessity of providing identification

and intervention services for students with learning difficulties within educational settings (Lundblom & Woods, 2012).

The effectiveness of the strategy of developing psychological processes in teaching students with learning difficulties is directly contingent upon the teacher's ability to implement it effectively. Without the active role of a skilled teacher, the strategy cannot achieve its intended outcomes. A successful teacher of students with learning difficulties is distinguished by their professional insight and educational expertise, which enable them to select and apply strategies that align with the individual and group needs of their students. This approach supports educational activities both within and beyond the resource room. Teachers of students with learning difficulties face unique professional challenges, as they work with a diverse group of students who each have distinct individual needs and characteristics. Proponents of the strategy of developing basic psychological processes argue that children with specific developmental defects or disabilities may experience inhibited learning if these defects are not addressed and corrected (Al-Khafaf, 2015).

Basic Psychological Process Concepts

Psychological processes are reactions to various external influences. They involve interpreting and explaining stimuli, assigning them meaning and significance, and rely heavily on the effectiveness and integrity of cognitive functions such as attention, perception, and memory.

1. Attention

The concept of attention has garnered significant interest among researchers and has been defined in various ways, including the following:

- The **Encyclopedia of Psychology** defines attention as “focusing one’s awareness on a specific subject, a transitional process through which focus is directed toward a particular activity at the expense of competing activities.” Thus, attention fulfills a selective function, enabling the individual to concentrate on certain stimuli while filtering out others (Comprehensive Encyclopedia of Psychology, 1999, p. 51).
- Al-Saratawi, Al-Saratawi, Khashan, and Abu Judeh (2001, p. 260) define attention as: “Focusing mental effort on cognitive or sensory events. Observable behaviors indicative of attention include maintaining engagement in an educational activity, sustaining eye contact with the teacher, observing facial expressions and responding appropriately, following instructions accurately, and succeeding in performing educational tasks.” From these perspectives, attention can be understood as the individual’s ability to focus on a single stimulus amid surrounding stimuli, maintain consistent performance, and execute tasks with precision to achieve success.

Types of Attention

According to Khasawneh (2013), attention can be classified into three types:

1. **Forced or Compulsory Attention:** This occurs when stimuli impose themselves on an individual’s senses due to their intensity, compelling the individual to focus on them involuntarily.
2. **Voluntary Attention:** In this type, the individual exercises freedom of choice in deciding whether to pay attention to specific stimuli or not.
3. **Automatic Attention:** This occurs when the individual’s focus is naturally drawn to stimuli because of their level of excitement or attractiveness. As these stimuli positively capture attention, automatic attention is considered the most effective type of attention for learning purposes.

The role of strategy in developing attention:

1. Training on Mental Processes

Training on mental processes is critically important, as it assumes that the processes involved in learning specific topics can be identified and enhanced through targeted training. It is believed that such training can strengthen these processes, thereby improving students’ ability to acquire academic skills. Various methods and strategies are utilized for therapeutic intervention in the attention process, many of which focus on training psychological processes. Advocates of this strategy emphasize the importance of considering psychological processes when designing educational programs for individuals with learning difficulties. According to proponents, training psychological processes plays a pivotal role in academic progress, as it is possible to train children to improve these processes, leading to enhanced performance and academic achievement (Al-Qasim, 2000).

Teachers must employ educational methods and strategies that foster motivation and attention behaviors in specific educational tasks. As outlined by Al-Atoum (2004), the following exercises are effective in improving attention:

- Direct the child’s attention toward stimuli related to the specific educational skill.
- Inform the child about the key stimuli during task analysis.
- Minimize the number and complexity of unrelated stimuli.

- Increase the intensity of task-related stimuli.
- Introduce new and unfamiliar stimuli and experiences.
- Utilize tactile and movement-based methods to engage the senses.
- Present materials in homogeneous groupings.
- Use prior knowledge and experiences to direct attention.
- Gradually increase the attention span and the time required to complete tasks, while providing frequent breaks.
- Break tasks into manageable units that are easy to learn.
- Incorporate individual training for the child whenever possible.
- Ensure that the educational material is suited to the child's abilities.
- Continuously encourage the child's success while reinforcing task-related stimuli.

2. Perceptual Processes

Al-Sayed (2008) defines perception as the psychological process that enables individuals to derive meaning and significance from objects, people, and situations. This is achieved by organizing sensory stimuli and interpreting them into meaningful connotations.

Types of Cognitive Difficulties

Cognitive difficulties impact various cognitive, skill-based, and motor functions, manifesting as weaknesses or reduced effectiveness in cognitive mental activities. These challenges, in turn, affect academic achievement. According to Al-Atoum (2004), cognitive difficulties can be categorized as follows:

- **Difficulty Distinguishing Between Stimuli:** Challenges in differentiating one stimulus from another.
- **Difficulties in Visual-Motor Coordination:** Impairments in the ability to coordinate visual input with motor responses.
- **Slow and Impaired Perception:** Delays or deficiencies in interpreting sensory information.
- **Difficulties in Organizing Perceptions:** Challenges in arranging sensory inputs into coherent structures.
- **Difficulties Arising from Cognitive Patterning:** Problems related to recognizing and utilizing cognitive patterns.
- **Functional Disorders Affecting the Senses:** Disorders that impair sensory functions, leading to subsequent cognitive difficulties.

The Role of Strategy in Developing the Cognitive Process

The method of training psychological processes is one of the fundamental therapeutic approaches in addressing learning difficulties. This method requires educators or psychologists to identify specific developmental deficiencies in children, as unaddressed deficiencies may continue to disrupt the learning process.

One notable study employing this method for the therapeutic intervention of basic psychological processes is the research conducted by Strogilos, Stefanidis, and Tragoulia (2016). The intervention was divided into four consecutive tasks, each lasting one hour:

1. **Sensory Discrimination Difficulties:** The first task addressed psychological processes related to sensory discrimination. The Fernald method was employed to direct children's attention toward muscular sensation by training them in eye-hand coordination.
 2. **Visual Perception Defects:** The second task focused on visual perception, emphasizing the ability to perceive wholes through details. For example, this involved recognizing common word endings and breaking words into syllables and letters.
 3. **Shape and Ground Defects:** The third task targeted issues with distinguishing between important and unimportant stimuli. During this task, the teacher read a story to the children and instructed them to draw a picture based on the story in their notebooks. After completing the drawings, the children were trained to read the story and provide it with an appropriate title.
 4. **Integrated Defects:** The fourth task aimed to address all three previously identified deficiencies, providing a holistic approach to improving psychological processes.
- These targeted interventions demonstrate how structured training in psychological processes can effectively support children in overcoming developmental challenges and enhancing their learning capabilities (Al-Sayed, 2008).

3. Memory

Memory is the ability to recall information that has been seen, heard, practiced, or trained. Children with significant issues in visual or auditory memory often encounter difficulties in learning to read, spell, write, and perform psychological operations (Jadoua, 2013).

Developing the Memory Process

Several methods can be employed to improve memory retention and recall. As outlined by Al-Khatib (2015), these strategies include:

- **Linking Strategy:** This approach helps students or children remember information by associating it with a specific event or date.
- **Repetition Strategy:** Continuous repetition imprints information in the memory, keeping it accessible for future retrieval. This method accommodates individual differences among learners, as some may grasp information immediately, while others require repeated exposure to retain it.
- **Collection Strategy:** This strategy involves organizing information into smaller, manageable units, such as grouping the lunar and solar letters.
- **Story Strategy:** Narratives that represent a sequence of events linked in time and space enable individuals to recall the events more effectively.
- **Note-Writing Strategy:** Writing notes significantly enhances the ability to retrieve information compared to not recording notes.
- **First Letter Strategy:** This method builds meaningful words or phrases using the first letters of a set of words, sentences, or lines of poetry, aiding in memory retention.

In this context, Abahussain (2014) conducted a study to examine the extent to which female student teachers specializing in learning difficulties within the special education department utilized modern teaching strategies. These strategies included task analysis, sensory linking, multiple senses, role exchange, concept mapping, and brainstorming, and were applied to female students with learning difficulties. The study sample consisted of 30 female student teachers in Riyadh.

The study adopted a descriptive analytical methodology, which was deemed suitable for achieving the study's objectives. Data collection was carried out using a questionnaire. The findings revealed the order in which teaching strategies were used with students with learning difficulties by the female student teachers, ranked by frequency: sensory linking strategy was the most frequently used, followed by task analysis, multiple senses, role exchange, brainstorming, and finally, concept mapping.

The results also highlighted disparities in the sources of information acquisition. The curriculum was reported as the most common source of knowledge, while training courses significantly benefited teachers who had attended more sessions compared to those with fewer training opportunities. Regarding obstacles, the study identified two key issues: the lack of emphasis on modern teaching strategies in the course on teaching methods for learning difficulties, and the absence of practical training on these strategies during the case study course.

Indelicato's study (2014) aimed to investigate the extent to which the collaborative teaching strategy is employed to improve and enhance the relationships among teachers involved in collaborative teaching. The study sample included classroom teachers for grades one through four, their collaborating teachers, and a learning difficulties teacher at the school. Data were collected using a questionnaire. The findings revealed that the use of the collaborative teaching strategy by teachers was limited. Additionally, many participants reported a lack of equality during lesson delivery in collaborative teaching, as well as ambiguity regarding their roles in classroom management, lesson procedures, and implementation. The study also highlighted weak communication between regular classroom teachers and learning difficulties teachers in collaborative teaching settings.

Aba Hussein and Al-Hussein (2016) conducted a study to determine the level of application of the collaborative teaching strategy among teachers of students with learning difficulties in intermediate and secondary stages. The study sample consisted of 50 learning difficulties teachers from government schools in Riyadh. Data collection was carried out using a questionnaire. The results showed a high level of knowledge among teachers regarding the concept of the collaborative teaching strategy and its foundational principles. However, the application level of the strategy in learning difficulties programs was found to be moderate in both the intermediate and secondary stages.

Strogilos, Stefanidis, and Tragoulia (2016) explored teachers' attitudes toward using educational activities for students with learning difficulties. The study sample included 400 teachers of learning difficulties in Greece, with data collected via a questionnaire. The results indicated that teachers' attitudes toward employing educational activities were average. Furthermore, no significant differences were found based on variables such as years of service or academic qualifications. However, a lack of time for preparing, planning, and evaluating educational activities was identified as a major obstacle to their effective use.

Building on these findings, the current study aims to examine the extent to which the strategy of developing psychological processes is employed by teachers of female students with learning difficulties, as well as to identify the obstacles hindering its implementation.

The problem of the study and its questions:

Primary developmental learning difficulties, such as challenges in attention, perception, and memory, often lead to secondary developmental learning difficulties, including difficulties in thinking and oral language. These difficulties are further linked to academic challenges in reading, writing, and mathematics. To address these issues, teachers of students with learning difficulties must implement educational strategies designed to mitigate primary developmental difficulties, thereby facilitating more effective and accessible learning. Strategies such as task analysis, sensory linking, multiple senses, role exchange, concept mapping, and brainstorming are effective tools for addressing academic difficulties in reading, writing, mathematics, language, and thinking.

Teachers must select strategies tailored to their students' specific abilities and challenges to ensure effective intervention. Among these strategies, the strategy of developing psychological processes is particularly significant. It helps students with learning difficulties become independent learners while enhancing their oral language skills and fostering various cognitive abilities, such as comprehension, application, analysis, synthesis, inference, problem-solving, decision-making, and skills in reading, writing, spelling, and mathematics (Hamadneh, Assi, & Hamadneh, 2017).

Drawing from her experience in public education schools in Saudi Arabia, the researcher observed that the use of the strategy of developing psychological processes is limited among most teachers of female students with learning difficulties. This observation aligns with findings from Indelicato's study (2014), which highlighted the low application of this strategy. Consequently, students are deprived of the benefits that such an approach could offer. These observations motivated the researcher to conduct the current study, aiming to answer the following research questions:

1. What is the degree of use of the strategy of developing psychological processes from the perspective of teachers of students with learning difficulties?
2. Are there statistically significant differences at the 0.05 level of significance in the use of the strategy of developing psychological processes, from the perspective of teachers of students with learning difficulties, attributed to the variable of academic qualification (bachelor's degree, postgraduate studies)?
3. Are there statistically significant differences at the 0.05 level of significance in the use of the strategy of developing psychological processes, from the perspective of teachers of students with learning difficulties, attributed to the variable of years of service (less than 5 years, 5–10 years, more than 10 years)?
4. Are there statistically significant differences at the 0.05 level of significance in the use of the strategy of developing psychological processes, from the perspective of teachers of students with learning difficulties, attributed to the variable of the number of training courses (less than 5 courses, more than 5 courses)?
5. What are the obstacles to using the strategy of developing psychological processes, from the perspective of teachers of students with learning difficulties?

Study objectives:

The current study aimed to achieve the following objectives:

1. Identify the degree to which the strategy of developing psychological processes is used, as perceived by teachers of students with learning difficulties.
2. Examine the differences in the use of this strategy based on the variables of academic qualification, years of service, and the number of training courses attended.
3. Identify the obstacles to implementing the strategy of developing psychological processes, as perceived by teachers of students with learning difficulties.

Significance of the study

The significance of this study is highlighted through the following points:

- **Focus on Psychological Processes:** The study sheds light on the psychological processes—perception, attention, and memory—of students with learning difficulties. It also emphasizes the importance of educating female students with learning difficulties, addressing a concept that extends beyond a single academic subject to impact all areas of learning.
- **Understanding the Target Age Group:** The study focuses on an age group that represents a critical developmental stage. At this stage, students need to achieve a degree of psychological process development to master academic content and engage in higher-order thinking skills such as discussion, inference, acceptance, and rejection.

- **Promoting an Integrated Educational Approach:** The study seeks to support an integrated educational process for students with learning difficulties by utilizing the strategy of developing psychological processes (attention, perception, memory). This approach aims to enhance the effectiveness of individualized educational programs for students with learning difficulties.
- **Contributions to Educational Practice:** The findings of this study are expected to assist educational specialists in assessing the extent to which the strategy of developing psychological processes is employed, based on the perspectives of teachers of students with learning difficulties. The insights gained will aid in formulating appropriate plans and strategies that effectively contribute to achieving the objectives of individualized educational programs. Ultimately, these efforts aim to improve educational inputs and address the learning needs of students with learning difficulties.

Study limitations:

1. **Objective Limitations:** The study was confined to examining the extent of using the strategy of developing psychological processes, as perceived by teachers of students with learning difficulties. It also explored variations based on academic qualification, years of service, and the number of training courses attended.
2. **Spatial Limitations:** The study was conducted among teachers of students with learning difficulties working in programs attached to public education schools in Riyadh, Kingdom of Saudi Arabia.
3. **Temporal Limitations:** The study was implemented during the second semester of the academic year 1437–1438 AH.

Study Terms

The following key concepts and terms were used in this study, defined as follows:

- **Psychological Process Development Strategy:** This is defined as one of the primary therapeutic methods aimed at enhancing abilities in basic psychological processes, including attention, perception, and memory. It involves the identification of one or more specific developmental deficits by the learning difficulties teacher, who then develops a targeted treatment plan to address these difficulties through training activities on psychological processes (Hamadneh et al., 2017). Procedurally, this term refers to the total scores obtained by teachers of female students with learning difficulties on the study questionnaire.
- **Teachers of Students with Learning Difficulties:** These are educators who teach students experiencing disorders in one or more basic psychological processes, such as understanding and using spoken or written language. These disorders manifest as difficulties in listening, thinking, speaking, reading, writing (dictation, expression, handwriting), and mathematics, which are not attributed to mental, auditory, or visual disabilities, or other conditions such as learning environments or family care (Ministry of Education, 1437). Procedurally, this term refers to teachers working in the learning difficulties program attached to schools in Riyadh during the 1437/1438 AH academic year.
- **Obstacles:** Defined as any actions or practices that perpetuate behaviors hindering planning, development, or social progress (Atiq, 2002, p. 38). Procedurally, this term refers to the set of responses provided by teachers of female students with learning difficulties to the open-ended question in the study questionnaire.

The study Procedure

The study design

The descriptive survey approach was followed in conducting this study to achieve the study objectives and answer its questions.

The study population

The population of the current study includes all teachers of female students with learning difficulties in public schools across all educational levels (primary, intermediate, and secondary) in the city of Riyadh. During the study period, which took place in the second semester of the academic year 1437/1438 AH, the total number of teachers was 654. Of these, 329 teachers of female students with learning difficulties responded to the study questionnaire.

Table (1): Frequencies and percentages according to study variables

Variables	Categories	Frequency	Percentage
Educational qualification	Bachelor	285	78.4%
	Graduate Studies	71	21.6%
Years in service	Less than 5 years	100	30.7%
	5 -1 0 years	144	43.8%
	More than 10 years	85	25.8%
Number of workshops and	Less than or equal 5	240	72.9%

courses	More than 5	89	27.1%
Total		329	100.0%

Study tool: Questionnaire for using the strategy of developing psychological processes

This questionnaire was designed to explore the perspectives of teachers of students with learning difficulties regarding the use of psychological processes—specifically attention, perception, and memory—and to identify obstacles that hinder the effective implementation of these processes. The development of the questionnaire to assess the use of the strategy of developing psychological processes followed these steps:

1. **Review of Educational Literature:** Relevant educational literature, including works by Al-Qasim (2000) and Hamadneh et al. (2017), was consulted to define the concept of the strategy and its three key areas: attention, perception, and memory. Additionally, the cognitive developmental scales of Al-Zayat (2007) were reviewed, and several items were drafted based on the identified areas.
2. **Questionnaire Structure:** The final version of the questionnaire consisted of 28 items distributed across three domains:
 - **Domain 1:** Using the strategy in the **attention process** (items 1–8).
 - **Domain 2:** Using the strategy in the **perception process** (items 9–18).
 - **Domain 3:** Using the strategy in the **memory process** (items 19–28).

A five-point Likert scale was employed, where respondents (teachers of students with learning difficulties) were asked to indicate the extent of use for each item by marking (✓) in the appropriate column. The scale categories were: *Very Large*, *Large*, *Medium*, *Small*, *Very Small*, with corresponding weights of 5, 4, 3, 2, and 1, respectively.

3. **Open-Ended Question:** An open-ended question was added at the end of the questionnaire to capture additional insights. The question asked: *What are the obstacles to using the strategy of developing psychological processes (training psychological processes) in teaching students with learning difficulties?*

4. **Validity and Reliability:** After completing the preparation of the questionnaire, its validity and reliability were verified to ensure its appropriateness for the study objectives.

Validity of the Tool

The validity of the study tool was verified using two types of validity:

A. Content Validity

The initial version of the tool was reviewed by seven experienced and specialized arbitrators in special education, including faculty members. This review aimed to evaluate the tool's appropriateness for the study's objectives. The arbitrators assessed the tool based on the following criteria:

1. The suitability of the items to the tool's purpose.
2. The correctness of the phrasing of the statements.
3. The clarity of the linguistic meaning.

Based on the arbitrators' feedback and suggestions, necessary amendments were made. An agreement rate of 80% among the arbitrators was achieved regarding the importance of the proposed changes. Consequently, the final version of the tool was produced, consisting of 28 items.

B. Internal Consistency Validity

To assess the internal consistency validity of the tool, correlation coefficients were calculated for each item in relation to its respective domain and the overall scale. A pilot sample of 30 female teachers of students with learning difficulties, selected from outside the study population in the Riyadh region, was used for this purpose. The correlation coefficients were analyzed to determine the validity of each item. The coefficients ranged as follows:

- Between **0.31 and 0.65** for each item's correlation with the overall tool.
- Between **0.32 and 0.76** for each item's correlation with its respective domain.

All correlation coefficients were found to be acceptable and statistically significant. As a result, no items were removed from the study tool, confirming that the tool effectively measures what it was designed to measure.

Tool Reliability

The reliability of the study tool was verified using two methods:

1. Test-Retest Method

The tool was administered to a sample of 30 female teachers of students with learning difficulties from government schools in Riyadh, selected from outside the study sample. After two weeks, the tool was reapplied to the same sample. Pearson's correlation coefficient was calculated between the scores of the participants across

the two applications, both for the overall tool and for each domain. The overall reliability coefficient of the tool was found to be **0.90**, indicating a high level of reliability.

2. Internal Consistency Reliability

The internal consistency reliability of the tool was calculated using Cronbach's Alpha for both the overall tool and its individual domains. The overall internal consistency coefficient was **0.81**, demonstrating good reliability. The results indicate that all reliability coefficients for the study tool and its domains are robust and appropriate, supporting the tool's suitability for achieving the objectives of the study.

Scoring System

To calculate the total score of the tool, five response options were provided for each item. Respondents selected the option that best reflected their opinion. Scores were assigned to these options as follows:

- **5:** Very High
- **4:** High
- **3:** Medium
- **2:** Low
- **1:** Very Low

The total score for the tool ranged from a minimum of **28** (representing the lowest possible score) to **140** (representing the highest possible score).

To interpret the arithmetic means for individual items, domains, and the tool as a whole, the following scale was adopted for analyzing the results:

- **1.00–2.33:** Low
- **2.34–3.67:** Medium
- **3.68–5.00:** High

The scale intervals were determined by dividing the range of the scale (difference between the highest and lowest possible scores) by the number of categories. Each category range was calculated sequentially to ensure accurate classification.

Study Procedure

To achieve the objectives of the study, the following steps were undertaken:

1. **Preparation of the Study Tool:** The study tool was finalized after verifying its validity through a review by a committee of specialized arbitrators, assessing construct validity, and using appropriate statistical methods to ensure its reliability.
2. **Facilitation Letter:** A facilitation letter was obtained from the college deanship, addressed to the relevant educational authorities, requesting an official letter for the teachers targeted in the study to gather the necessary data for achieving the study's objectives.
3. **Coordination with School Administrations:** Appointments were scheduled with school administrations, and permission was requested to conduct the study in their schools. Administrations were provided with copies of the facilitation letters to clarify the researcher's role.
4. **Selection and Access to Study Sample:** The study sample was determined using the simple random sampling method. Teachers included in the sample were visited at their respective schools in Riyadh.
5. **Explanation and Distribution:** The study's objectives and purposes were explained to the participants, emphasizing that the information collected would be used solely for scientific research and treated with complete confidentiality. The study tool was distributed to the sample members via a link to an electronic questionnaire created by the researcher on Google Drive.
6. **Statistical Analysis:** The collected data were analyzed using Statistical Package for the Social Sciences (SPSS) to derive the results.
7. **Discussion and Recommendations:** The results were thoroughly discussed, and appropriate recommendations were formulated based on the study's findings.

The study variables

The main variable of the study is the use of the strategy of developing psychological processes. The independent variables include academic qualification, categorized into two levels (bachelor's degree and postgraduate studies); years of service, categorized into three levels (less than 5 years, 5–10 years, and more than 10 years); and the number of training courses, categorized into two levels (less than 5 courses and more than 5 courses).

Data Analysis

To address the study questions, various statistical methods were employed, including arithmetic means, standard deviations, *t*-tests for two independent samples, One-Way ANOVA, Scheffe's Test, as well as frequencies and percentages.

Results and Discussion

The results were presented and discussed according to the study questions as follows:

Results related to the first question and their discussion:

To address this question, arithmetic means and standard deviations were calculated for the domains related to the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties. The results are presented in Table 2.

Table 2: Arithmetic means and standard deviations for the domains representing the degree of use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, arranged in descending order.

Rank	No.	Domain	Mean	SD	Level
1	2	Using strategy in the perception process	3.13	0.46	Moderate
2	1	Using strategy in the attention process	3.06	0.54	Moderate
3	3	Using strategy in the process of remembering	3.01	0.41	Moderate
Total			3.07	0.67	Moderate

Table 2 shows that the arithmetic means for the domains related to the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, ranged between **3.01** and **3.13**, with standard deviations ranging from **0.41** to **0.57**. The domain of using the strategy in the **perception process** ranked first, with the highest arithmetic mean of **3.13**, a standard deviation of **0.46**, and an average rating. The **attention process** domain ranked second, with an arithmetic mean of **3.06**, a standard deviation of **0.57**, and an average rating. The **memory process** domain ranked third, with an arithmetic mean of **3.01**, a standard deviation of **0.41**, and an average rating.

The overall arithmetic mean for the tool was **3.07**, with a standard deviation of **0.67** and an average rating. These results indicate that the degree of use of the strategy of developing psychological processes by teachers of students with learning difficulties is **average**. This suggests that, while teachers often utilize components of the strategy in their teaching, the current educational practices do not fully align with the advancements in education seen in Saudi Arabia for teaching students with learning difficulties.

This discrepancy may be attributed to several obstacles. **Administrative obstacles** include a lack of technical resources and devices, and limited cooperation from school administrations in providing such resources, often due to the perception that these resources are either ineffective or financially wasteful. **Personal obstacles** include insufficient teacher training in the use of the strategy and a lack of participation in specialized training courses in this area.

The current findings align with those of Al-Assimi's study (2015), which revealed that the use of modern educational technologies by teachers in resource rooms was at an average level. Similarly, the results are consistent with the study by Abu Hussein and Al-Hussein (2016), which found that the level of application of the collaborative teaching strategy by teachers of students with learning difficulties in intermediate and secondary stages was also average. Additionally, the findings are in line with the study by Strogilos et al. (2016), which indicated that teachers' attitudes toward using educational activities for students with learning difficulties were average.

However, these results differ from those of Smith and Tremble's study (2008), which showed that teachers of students with learning difficulties employed collaborative teaching strategies extensively across all educational stages (primary, intermediate, and secondary). Conversely, Indelicato's study (2014) found that the extent of teachers' use of the collaborative teaching strategy was low.

Results related to the second question and their discussion:

To address this question, the arithmetic means and standard deviations for the use of the strategy of developing psychological processes were calculated, as perceived by teachers of female students with learning difficulties, based on the variable of academic qualification (bachelor's degree and postgraduate studies). To

determine statistical differences between the arithmetic means, a *t*-test was conducted. **Table 3** presents the results.

Table (3): Arithmetic means, standard deviations, and *t*-test for the effect of the educational qualification variable on the degree of the reality of using the strategy of developing psychological processes from the point of view of teachers of female students with learning difficulties.

Domains	Categories	N	Mean	SD	T	Df	Sig.
Using strategy in the attention process	Bachelor	285	3.07	0.526	0.29	327	0.772
	Graduate Studies	71	3.04	0.728			
Using strategy in the perception process	Bachelor	258	3.13	0.427	0.38	327	0.701
	Graduate Studies	71	3.11	0.527			
Using strategy in the process of remembering	Bachelor	258	3.02	0.406	1.052	327	0.130
	Graduate Studies	71	2.094	0.25			
Total	Bachelor	258	3.08	0.337	0.92	327	0.361
	Graduate Studies	71	3.03	0.455			

Table 3 indicates that there are no statistically significant differences at the significance level ($\alpha \leq 0.05$) attributable to the academic qualification variable on the degree of using the strategy for developing psychological processes, as perceived by teachers of female students with learning difficulties, across all domains and the total score. Specifically, the *t*-value for the attention process domain was **0.29** ($p = 0.772$), for the perception process domain was **0.38** ($p = 0.701$), for the memory process domain was **1.52** ($p = 0.130$), and for the total score was **0.92** ($p = 0.361$). These findings suggest that academic qualifications, whether at the undergraduate or postgraduate level, do not significantly influence the extent to which teachers use the strategy for developing psychological processes. This may be due to the fact that the curricula for both levels do not adequately address this strategy, its components, or its application in teaching and training students with learning difficulties. As a result, teachers across academic qualification levels may share similar understandings of this strategy. These findings are consistent with the results of Strogilos et al. (2016), which reported no significant differences in the use of educational activities strategies by teachers of students with learning difficulties based on their academic qualifications.

Results related to the third question and their discussion:

To address this question, the arithmetic means and standard deviations for the use of the strategy of developing psychological processes were calculated, as perceived by teachers of female students with learning difficulties, based on the variable of years of service (less than 5 years, 5–10 years, and more than 10 years). Table 4 presents the results.

Table 4: Arithmetic means and standard deviations for the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, categorized by the variable of years of service.

Domains	Categories	N	Mean	SD
Using strategy in the attention process	Less than 5 years	100	2.095	0.50
	5 – 10 years	144	3.06	0.62
	More than 5 years	85	3.19	0.56
	Total	329	3.06	0.57
Using strategy in the perception process	Less than 5 years	100	3.11	0.46
	5 – 10 years	144	3.07	0.49
	More than 5 years	85	3.25	0.40
	Total	329	3.13	0.64
Using strategy in the process of remembering	Less than 5 years	100	2.90	0.40
	5 – 10 years	144	3.06	0.45
	More than 5 years	85	3.05	0.33
	Total	329	3.01	0.41
Total	Less than 5 years	100	2.99	0.35
	5 – 10 years	144	3.06	0.40
	More than 5 years	85	3.16	0.30
	Total	329	3.07	0.37

Table 4 demonstrates an apparent variation in the arithmetic means and standard deviations for the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, based on differences in the categories of the years of service variable. To determine the statistical significance of these differences, a one-way analysis of variance (ANOVA) was conducted. The results are presented in Table 5.

Table 5: One-way analysis of variance (ANOVA) results for the effect of the years of service variable on the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties.

Domains	Source	Sum of squares	Df	Mean squares	F	Sig
Using strategy in the attention process	Between groups	2.0738	2	1.369	4.238	0.015
	Within groups	105.328	326	0.323		
	Total	108.678	328			
Using strategy in the perception process	Between groups	1.654	2	0.827	3.928	0.021
	Within groups	68.637	326	0.211		
	Total	70.290	328			
Using strategy in the process of remembering	Between groups	1.664	2	0.832	5.040	0.007
	Within groups	53.813	326	0.165		
	Total	55.477	328			
Total	Between groups	1.348	2	0.678	5.174	0.006
	Within groups	42.376	326	0.130		
	Total	43.869	328			

Table 5 reveals that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) attributable to the effect of the years of service variable on the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, across all domains and for the tool as a whole. To identify the specific pairwise differences between the arithmetic means, post hoc comparisons were conducted using the Scheffe Test. The results are presented in Table 6.

Table 6: Post-hoc comparisons using the Scheffe Test for the effect of the years of service variable on the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties.

Domains	Categories	Mean	Less than 5 years	5 – 10 years
Using strategy in the attention process	Less than 5 years	2.95		
	5 -1 0 years	3.06	-0.11	
	More than 10 years	3.19	- 0.24(*)	- 0.13
Using strategy in the perception process	Less than 5 years	3.11		
	5 -1 0 years	3.07	0.04	
	More than 10 years	3.25	- 0.14	- 0.17(*)
Using strategy in the process of remembering	Less than 5 years	2.95		
	5 -1 0 years	3.06	(*)-0.16	
	More than 10 years	3.05	- 0.15	0.01
Total	Less than 5 years	2.99		
	5 -1 0 years	3.06	- 0.8	
	More than 10 years	3.16	(*)-0.17	-0.10

***Significant at the significance level ($\alpha = 0.05$).**

Table 6 reveals statistically significant differences at the significance level ($\alpha \leq 0.05$) in the degree of using the strategy for developing psychological processes, as perceived by teachers of students with learning difficulties. These differences are evident in the areas of using the strategy in the **attention process**, the **perception process**, and the **total score**, and they are attributed to the effect of the years of service variable. Specifically, the differences favor the category of teachers with more than 10 years of service. In the area of using the strategy in the **memory process**, the differences favor the category of teachers with 5–10 years of service.

These findings suggest that teachers with more years of service are more likely to implement the strategy for developing psychological processes effectively. This may be due to their experience and motivation to excel, gain recognition from school leadership and the local community, and improve their teaching practices for students with learning difficulties. Additionally, experienced teachers may recognize that employing methods and approaches based on the strategy for developing psychological processes enhances the teaching and learning experience. Such strategies make education more engaging and enjoyable for students, incorporating elements of excitement, suspense, curiosity, and exploration, which improve attention and perception. They also create a rich, interactive environment that fosters student-teacher interaction and supports the overall educational process.

These results differ from those of Strogilos et al. (2016), which found no significant differences in teachers' use of the educational activities strategy based on years of service. However, they align partially with the findings of

Al-Assimi (2015), which identified significant differences in the use of modern educational technologies in resource rooms, favoring teachers with fewer years of service (5 years or less and 6–10 years).

Results related to the fourth question and their discussion:

To address this question, arithmetic means and standard deviations were calculated for the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties, based on the variable of the number of training courses attended. To determine the statistical significance of differences between the arithmetic means, a *t*-test was conducted. Table 7 presents the results.

Table 7: Arithmetic means, standard deviations, and *t*-test results for the effect of the number of training courses on the use of the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties.

Domains	Categories	N	Mean	SD	T	Df	Sig
Using strategy in the attention process	Less than 5 courses	240	2.97	0.562	- 5.109	327	0.00
	More than 5 courses	89	3.23	0.533			
Using strategy in the perception process	Less than 5 courses	240	3.08	0.446	- 3.224	327	0.001
	More than 5 courses	89	3.26	0.408			
Using strategy in the process of remembering	Less than 5 courses	240	2.99	0.26	-1.187	327	0.238
	More than 5 courses	89	3.05	0.26			
Total	Less than 5 courses	240	3.02	0.362	-4.234	327	0.000
	More than 5 courses	89	3.20	0.319			

Table 7 indicates that there are statistically significant differences at the significance level ($\alpha = 0.05$) attributable to the effect of the variable *number of training courses* in several areas of using the strategy of developing psychological processes. Specifically, significant differences were found in the domain of **strategy use in the attention process**, where the *t*-value was **-5.109** ($p = 0.000$), in the domain of **strategy use in the perception process**, where the *t*-value was **-3.224** ($p = 0.001$), and in the **total score**, where the *t*-value was **-4.234** ($p = 0.000$). However, no significant differences were observed in the domain of **strategy use in memory**, where the *t*-value was **-1.187** ($p = 0.236$).

These findings indicate that teachers who have attended more than five training courses are more likely to practice and implement the strategy of developing psychological processes compared to those who have attended fewer than five courses. This may be because attending these training courses allows teachers to stay updated with the latest advancements in teaching strategies for students with learning difficulties, thereby enhancing their professional and teaching performance. The exposure to modern and diverse teaching methods, such as the strategy of developing psychological processes, equips them with the necessary tools to apply these approaches effectively.

The results align with Abahussain's study (2014), which found statistically significant differences in the extent to which female student teachers in the learning difficulties track used the latest teaching strategies for students with learning difficulties. These differences were attributed to the number of training courses completed, favoring those who attended more courses.

Results related to the fifth question and their discussion:

To address this question, the responses to the questionnaire completed by $n = 329$ teachers of students with learning difficulties were analyzed. The frequencies and percentages of the sample members' responses to the open-ended question in the study tool were calculated. This question was designed to identify the obstacles to using the strategy of developing psychological processes when teaching students with learning difficulties, as perceived by teachers. The results are presented in **Table 8**.

Table 8: Frequencies and percentages of obstacles to using the strategy of developing psychological processes, as perceived by teachers of female students with learning difficulties.

N	Barriers	F	%
1.	The lack of availability of educational tools and technologies to use the strategy and the lack of cooperation from the school administration in providing them.	270	81%
2.	The large number of female students enrolled in the learning difficulties program and resource	263	80%

	rooms.		
3.	The lack of qualification of some teachers to use the strategy of developing psychological processes.	247	75%
4.	Lack of clarity of the basic elements of the psychological operations strategy for some teachers in resource rooms.	232	70%
5.	Lack of necessary courses.	221	67%
6.	Lack of service in its practice.	217	66%
7.	Not having sufficient training to use the strategy of developing psychological processes due to the short training period.	209	63%
8.	Not attending sufficient training workshops on using the strategy of developing psychological processes.	192	58%
9.	The long time it takes to prepare and set up a strategy for developing psychological operations.	184	56%
10.	Poor strategic planning in advance to implement the strategy.	180	55%
11.	Poor response from students with learning difficulties due to difficulty controlling their behavior.	178	54%
12.	Noise, poorly equipped resource rooms, and easy distraction for students with learning difficulties.	171	52%

Table 8 highlights 12 obstacles that teachers of students with learning difficulties face when using the strategy of developing psychological processes in their teaching. These findings provide practical, applied benefits for teachers of learning difficulties, helping them address these obstacles in educational institutions. Moreover, it is hoped that educational policymakers in Saudi Arabia will utilize these insights to establish standards that improve the educational environment for students with learning difficulties, contributing to societal progress and global competitiveness.

The current findings align with several previous studies. For instance, Abahussain's study (2014) identified obstacles such as the lack of emphasis on modern strategies in the *methods of teaching learning difficulties* course during university education and insufficient training in these strategies during the *case study* course. Similarly, Indelicato's study (2014) attributed challenges in using the collaborative teaching strategy for students with learning difficulties to difficulties in classroom management, teaching, and implementation procedures. Strogilos et al. (2016) also noted that obstacles to using educational activities strategies were primarily due to teachers' lack of time for preparing, planning, and evaluating educational activities.

Additionally, the results of the current study are consistent with findings from Indelicato (2014), Al-Asimi (2015), and Abu Hussein and Al-Hussein (2016), which identified weak communication between regular classroom teachers and teachers of students with learning difficulties in collaborative teaching. These studies also highlighted statistically significant differences in the use of modern educational technologies in resource rooms, influenced by the variable of years of service, and found that the application level of collaborative teaching strategies in learning difficulties programs was average in intermediate and secondary stages.

Furthermore, the current study aligns with Strogilos, Stefanidis, and Tragoulia (2016), who reported that teachers' attitudes toward using the educational activities strategy for students with learning difficulties were average. They also observed no differences in its use based on years of service or academic qualifications. However, the lack of time for teachers to prepare, plan, and evaluate educational activities was a significant obstacle to their implementation.

II. Discussion

The findings of this study indicate that the strategy of developing psychological processes is utilized at an average level by teachers of female students with learning difficulties. This outcome aligns with Al-Assimi (2015), who reported an average application of modern educational technologies in resource rooms, suggesting that teachers often face barriers in adopting innovative methods. The results also align with Strogilos, Stefanidis, and Tragoulia (2016), who found average attitudes toward the use of educational strategies for students with disabilities. These findings highlight the need for increased training and awareness programs to help teachers understand and effectively implement this strategy.

Teachers with more years of service and those who attended more training courses showed higher levels of strategy use. This is consistent with the findings of Abahussain (2014), who noted significant differences in the use of modern teaching strategies by student teachers, attributed to their training. Teachers with extensive experience may seek to enhance their teaching practices and align with the latest educational advancements, as emphasized by Al-Khatib (2015). This suggests that continuous professional development and access to relevant training can significantly improve the implementation of effective teaching strategies.

One notable obstacle highlighted in this study is the lack of resources and support from school administrations, which echoes findings by Al-Waqfi (2009). Many teachers reported challenges in accessing the necessary tools and technologies to implement psychological process development strategies effectively. This limitation underscores the importance of equipping schools with the appropriate infrastructure to facilitate these strategies, as noted by Ibrahim (2010).

The study also identified personal barriers, such as insufficient training and a lack of specialized knowledge among some teachers. Al-Zayat (2007) emphasized the importance of equipping teachers with theoretical and practical knowledge of psychological processes to improve educational outcomes. The absence of such training not only limits the potential benefits of these strategies but also affects the quality of education for students with learning difficulties.

Another significant finding is the discrepancy in strategy use among teachers based on their training. Teachers who attended fewer training courses demonstrated lower levels of strategy use. This aligns with Abahussain (2014), who stressed that targeted training is critical for ensuring teachers are well-equipped to adopt modern strategies. Addressing this gap requires educational policymakers to prioritize professional development programs, as suggested by the National Center for Measurement and Evaluation (2013).

Finally, the results suggest that implementing psychological process development strategies requires a supportive and enriched educational environment. As noted by Al-Qurashi (2012), strategies that focus on psychological processes can enhance learning by fostering curiosity, attention, and cognitive engagement. Policymakers should consider establishing standards and frameworks that reduce barriers, promote collaboration among educators, and ensure sustained professional growth. Future research could explore additional variables such as gender, age, and geographic region to provide a more comprehensive understanding of the factors influencing the use of these strategies.

III. Conclusion

In conclusion, this study highlights the importance of the strategy of developing psychological processes in enhancing the educational outcomes of students with learning difficulties. The findings indicate that the use of this strategy by teachers remains at an average level, influenced by factors such as years of service, training, and the availability of resources. Significant challenges, including insufficient training, lack of time, and limited support from educational institutions, hinder its effective implementation. To address these issues, it is essential to provide targeted training programs, improve access to necessary resources, and establish standards to overcome obstacles. By fostering a more supportive educational environment and increasing awareness of the strategy's benefits, teachers can enhance their ability to meet the needs of students with learning difficulties, ultimately contributing to improved educational practices and outcomes. Further research involving larger and more diverse populations is recommended to expand the understanding and application of this strategy across various contexts.

IV. Recommendations

In light of the study's findings, several recommendations can be made. It is essential for the Ministry of Education to provide training, awareness programs, and workshops aimed at educating teachers of students with learning difficulties about the importance and practical application of the strategy of developing psychological processes. This would help elevate the level of teachers' use of this strategy from average to high in the future. Additionally, training programs should specifically target teachers with more years of service who have completed fewer than five training courses, as they demonstrated lower levels of strategy use compared to other groups. Educational officials and decision-makers should prioritize the provision of necessary educational resources to facilitate the implementation of the strategy in schools and programs for students with learning difficulties, given its critical role in improving the educational process and supporting teachers' efforts. Furthermore, it is crucial to establish standards aimed at reducing obstacles to the use of the strategy, thereby enhancing the educational environment and aligning it with global standards. Finally, a similar survey study could be conducted on larger populations, incorporating additional variables such as gender, teacher age, and educational region, to enrich organizational knowledge and provide greater diversity in insights.

References

- [1]. Aba Hussein, W., & Al-Hussein, R. (2016). The level of application of collaborative teaching by teachers of students with learning difficulties in the intermediate and secondary stages. *Journal of Special Education and Rehabilitation*, 3(12), 165–200.
- [2]. Aba Hussein, W. b. A. R. (2014). Student teachers' employment of modern teaching strategies with students with learning difficulties. *Journal of Education and Psychology Message - Egypt*, 48, 189–214.
- [3]. Ibrahim, S. (2010). *Psychology of learning difficulties*. Alexandria: Dar Al-Wafa for Printing and Publishing.
- [4]. General Secretariat for Special Education. (1422 AH). *Regulatory rules for special education institutes and programs affiliated with the Ministry of Education*. Riyadh: General Secretariat for Special Education Press.
- [5]. Al-Batayneh, O., Al-Rashdan, M., Al-Sabaila, O., & Al-Khatatbeh, A. M. (2012). *Learning difficulties: Theory and practice* (5th ed.). Amman: Dar Al-Masirah.
- [6]. Jadoua, I. (2013). *Learning difficulties*. Amman: Dar Al-Yazouri Scientific Publishing and Distribution.
- [7]. Hamadneh, B., Asi, K., & Hamadneh, K. (2017). *Learning difficulties in reading, spelling and writing: Methods and strategies for teaching them*. Riyadh: Maktabat Al-Rushd Publishers.
- [8]. Khasawneh, M. A. (2013). *Developmental learning difficulties*. Amman: Dar Al-Fikr.
- [9]. Al-Khatib, J. M. (2013). *Introduction to learning difficulties*. Dammam: Al-Mutanabbi Library.

- [10]. Al-Khatib, A. (2015). Introduction to learning difficulties: A practical guide for learning difficulties teachers (1st ed.). Irbid: Alam Al-Kutub Al-Hadith for Publishing and Distribution.
- [11]. Al-Khafaf, I. (2015). Learning difficulties. Amman: Dar Al Manahj for Publishing and Distribution.
- [12]. Al-Rawsan, F. (2012). Methods of measurement and diagnosis in special education. Amman: Dar Al-Fikr Publishers and Distributors.
- [13]. Al-Zayat, F. M. (1998). Learning difficulties and the foundations and theories of diagnosis and treatment (1st ed.). Cairo: Dar Al-Nashr for Universities.
- [14]. Al-Zayat, M. F. (2007). Learning difficulties: Teaching strategies and therapeutic approaches. Cairo: Dar Al-Nashr for Universities.
- [15]. Al-Saratawi, Z., Al-Saratawi, A., Khashan, A., & Abu Judeh, W. (2004). Introduction to learning difficulties. Riyadh: Dar Al-Zahra.
- [16]. Al-Sayed, A. H. (2008). Developmental learning difficulties. Cairo: Alam Al-Kutub.
- [17]. Al-Zahir, Q. (2008). Introduction to special education. Amman: Dar Wael.
- [18]. Al-Atoum, A. (2004). Cognitive psychology. Amman: Dar Al-Masirah.
- [19]. Ateeq, A. M. Q. (2002). Obstacles to social development in Yemen (a theoretical analytical study) (Master's thesis). College of Arts, University of Baghdad.
- [20]. Al-Qasim, J. (2000). Basics of learning difficulties. Amman: Dar Safa.
- [21]. Al-Qurashi, A. (2012). Teaching people with special needs: Between design and implementation (1st ed.). Cairo: Alam Al-Kutub.
- [22]. National Center for Measurement and Evaluation. (2013). Standards for learning difficulties teachers: King Abdullah Project for the Development of Public Education. Retrieved from <http://www.qiyas.sa/Tests/ProfessionalTesting/DocLib1>
- [23]. Comprehensive Encyclopedia of Psychology. (1999). Beirut: Dar Al-Jeel.
- [24]. Ministry of Education. (1437). Organizational guide for special education institutes and programs in the Kingdom of Saudi Arabia.
- [25]. Al-Waqfi, R. (2009). Learning difficulties: Theoretical and applied (1st ed.). Amman: Dar Al-Masirah.
- [26]. Guerra, L. (2015). The effects of cross-age tutoring on reading fluency (Master's thesis). California State University, Stanislaus. Retrieved from <http://scholarworks.csustan.edu/bitstream/handle>
- [27]. Indelicato, J. (2014). How to build an effective co-teaching relationship between teachers (Master's thesis). Dominican University of California.
- [28]. Lundblom, E., & Woods, J. (2012). Working in the classroom: Improving idiom comprehension through classwide peer tutoring. *Communications Disorders Quarterly*, 33, 202–219.
- [29]. Strogilos, V., Stefanidis, A., & Tragoulia, E. (2016). Co-teachers' attitudes towards planning and instructional activities for students with disabilities. *European Journal of Special Needs Education*, 31(3), 344–359.