

## Teachers' Knowledge, Attitudes and Reported Strategies to Assess and Support the Students with Learning Difficulties

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**Abstract:** Over the last decade, the pressure has increased for teachers to facilitate the best possible learning for all children. Teachers' knowledge, attitudes and practice influence students' learning.

**Aim of the study:** to investigate teachers' knowledge, attitudes and reported strategies to assess and support the students with learning difficulties and to compare between the urban and rural teachers' attitudes and skills of assessment and supporting the students with learning difficulties.

**Material and Methods:** Analytic comparative cross sectional study design was used in this study. This study was conducted at the governmental pre-schools and primary schools of El-Mehalla El-Koubra city as an urban schools and AL-Hayatem village as rural schools. A convenient sample of 476 teachers in the selected schools who were willing to participate was included in the study. Two tools were used by the researchers to obtain the necessary data, the structured questionnaire sheet and the Opinion Relative to Integration Scale (ORI).

**Results:** Nearly half (40.7% and 46% respectively) of the studied sample in rural and urban areas their age ranged from 34 - 43, with a mean (40.3122± 7.58) and (38.7143 ±7.71) years. More than half (56.1%) of the studied sample in rural area and nearly half of them in urban area (49.1%) were male. there was significant difference between rural and urban subjects in relation to their knowledge and attitudes Scores ( $p < 0.05$ ). There was positive correlation with total knowledge score and total score of reported practices and attitudes of studied sample regarding learning difficulties.

**Conclusion and recommendations:** there was positive correlation between age of the studied sample and their years of experience and total score of reported practices and negative correlation with total score of knowledge and attitude about learning difficulties. Orientation workshops about learning difficulties should be organized in schools and local education authorities training centers for in-service and novice teachers in order to allow teachers to develop their skills regarding learning difficulties and the management of inclusive classrooms.

**Keywords:** learning difficulties, teachers' knowledge, attitude and practice, students' inclusion.

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### I. Introduction

Learning is popularly regarded as the process of acquiring of new knowledge, behaviors, skills, values, preferences or understanding, and may involve synthesizing different types of information<sup>(1)</sup>. If a child is not keeping up with the curriculum at school, or is displaying behavioral problems, they may be facing a learning difficulty<sup>(2-5)</sup>. Learning difficulties (LD) are problems that affect the brain's ability to receive process, analyze, or store information<sup>(6)</sup>. It's a broad term that teachers, schools and assessors apply to kids who can't meet the "normal" requirements of classroom learning in the same way as others<sup>(2,3)</sup>. Learning difficulties fall into two categories: Global learning difficulties where the child or pupil has global learning problems and finds all aspects of learning and understanding difficult regardless of how they are taught. These children used to be called "slow learners. Specific learning difficulties where the students are usually bright and of at least average intelligence but have trouble with learning. These are the pupils that far too often get forgotten about or misunderstood and need very careful assessment. They often need to be taught differently from the norm and it is very important that the teacher understands how these kids learn and teaches them appropriately<sup>(3,5)</sup>.

Learning difficulties are common in early childhood. They appear in the activity of solving learning tasks and assign an inappropriate and ineffective behavior with a low yield<sup>(3)</sup>. At school, students with learning difficulties are often rejected by their peers or are victims of various forms of bullying<sup>(4-7)</sup>. Even if they are accepted, students with learning difficulties register delays of more than one year (mild difficulties) and more than two years (serious difficulties)<sup>(3)</sup>. The prevalence of learning disabilities in different regions of the world is estimated from 3 to 12 percent. Teachers, who have classes of 20 to 25 students in each, may have at least one, two or more students with learning difficulties<sup>(8)</sup>. The estimation of learning difficulty in the population of school children ranges from the lowest estimation about 2% to the highest estimation about 20-40%<sup>(9,10)</sup>.

The most common causes or influencing factors that contribute to learning difficulties can be biomedical, developmental, behavioral, emotional, social, environmental or family issues. The problem may be in the area of reading, math, written expression, auditory perception and communication disorders<sup>(3,4,10,11)</sup>. One of the serious consequences of learning difficulties is that young people who suffer from them do poorly in

school unless they are helped they tend to drop out of school and may fall into a range of antisocial behaviors. Other possible outcomes for individuals with LD who have not received appropriate intervention or help are low self esteem, suicide, family instability, substance abuse, depression, psychiatric problems and unemployment<sup>(4, 10, 12, 13)</sup> The characteristic manifestations of students with learning difficulties include: less attention paid to the instructions provided by the teacher and the task (and therefore reduced learning engagement); low self-esteem; dysfunctional attitude; negative behavior; lack of cognitive and metacognitive strategies; lack of organization and low efficiency; passivity; not taking risks; frustration; lack of motivation and depressive tendencies<sup>(4,12-14)</sup>. Learning difficulties in some pupils are diagnosed in nursery school when a parent or a teacher notices that the children cannot follow directions for a game or is struggling to do work that he or she should be able to do easily. But other pupils develop sophisticated ways of covering up their learning issues, so the learning difficulties may show up until the teen years when schoolwork - and life - gets more complicated<sup>(10,15)</sup>.

The challenge of achieving full educational and social integration of children with difficulties within the society can be easily achieved if the teachers possess better knowledge about disabilities, attitude towards children with disabilities and competencies to handle the children. Such knowledge and understanding will enable them to develop positive attitude towards children with disabilities which in turn leads to acquiring or developing better competencies to handle the children<sup>(13, 16, 17)</sup>. General education teachers usually have very little knowledge about learning difficulties in general. Common reasons for this are: First, teacher training programs devote little or no class hours for understanding the challenges learners with particular disabilities face and how to help them learn. Second, general education teachers typically don't undertake any further studies that focus on effective ways to teach learners with learning difficulties. Last, educational authorities do not provide ongoing in-service training for teachers about teaching learners with special needs<sup>(5, 14)</sup>.

Due to the abundance and prevalence of students with learning difficulties at schools- mainly primary schools, it seems necessary for primary school teachers to be increasingly familiar with the learning difficulty phenomenon more than other teachers and be able to identify these kinds of students in their classes via the scientific criteria and in the most favorable manner<sup>(17-19)</sup>. Class teachers have a responsibility to provide an environment which incorporates techniques and strategies recommended for the teaching of pupils with LD, choose appropriate learning objectives which challenge and support all pupils, manage access strategies and vary teaching styles to support the unique learning profile of each child, work with parents to keep them informed of the strategies and approaches being used and liaise with colleagues<sup>(20)</sup>. Recognizing the students with learning difficulties and employing particular educational methods for teaching this group of students, the informed teachers provide a lot of improvements in the students' performance and skill. the teachers 'attitude and high level of awareness about learning disabilities make the timely diagnosis of this disorder possible<sup>(21)</sup>.

Obviously, close cooperation between nurse, teachers, parents and physician is extremely important element in insuring that students have opportunities to develop their abilities to learn skills and concepts necessary to function well in society. School nurse view the school as a physical being who is a candidate for learning. One function and activity of current nursing practice include planning to meet the health needs of children in cooperation with physician and other member of the health team. A multimodal treatment approach is recognized as most effective. This includes medications, social accommodation for learning problems, and social skills training, family counseling, parent support groups and training in behavior management<sup>(10)</sup>. Teachers do not fulfill only an educational role; they act also as informers regarding academic or behavioral problems that are exhibited by students. They are often the ones who identify these problems and inform the relevant agencies<sup>(22,23)</sup>. Therefore, it is important that they are knowledgeable about the different types of Special Educational Need (SDN). The only way for teachers to meet these increasing needs is to cooperate with other professionals, such as school psychologists<sup>(10,24)</sup>. In this context, the aim of the present study is to examine the knowledge, practice and attitude that general teachers have about learning difficulties and to understand how urban and rural teachers' knowledge, practice and attitude differ.

## **II. Aim Of The Study**

### **The aim of the study was to:-**

- a- Investigate the teachers' knowledge, attitudes and reported strategies to assess and support the students with learning difficulties.
- b- Compare between the urban and rural teachers' knowledge, attitudes and reported strategies to assess and support the students with learning difficulties.

### **Research Questions**

- 1- What are the teachers' knowledge, attitude and reported strategies to assess and support the students with learning difficulties?
- 2- Are there any differences between urban and rural teachers' knowledge, attitude and strategies for teaching students with learning difficulties?

### **III. Materials And Methods**

#### **Materials**

**Study design:-** Analytic comparative cross sectional study design was used in this study.

**Settings of the study:-** This study was conducted at the following governmental pre-schools and primary schools of El-Mehalla El- Koubra city as an urban schools and AL-Hayatem village (the biggest rural village affiliated to -Mehala El- Kobra city) as rural schools.

**Schools of El-Mehalla El-Koubra (Urban schools):**Four primary governmental schools and the attached pre schools which were selected randomly to constitute about 25% from the total number of 16 schools in both east educational zone (Seven schools) and west educational zone (Nine schools).

**Schools of El-Hayatem village (Rural schools):** The entire village's governmental primary schools and the attached pre schools were included in the study. Their number was 6 schools.

**Study subjects:-** A convenient sample of 476 teachers in the selected schools who were willing to participate was randomly selected from the above settings to be included in the study. The total sample consisted of 64 teachers working at the preschools in both El-Mehalla El-Koubra city and El-Hayatem village (42 teachers from El-Mehalla and 22 teachers from El-Hayatem village) and 412 teachers working in the primary schools (245 teachers from El-Mehalla and 167 teachers from El-Hayatem village) who are responsible for teaching the main subjects (Arabic, Math, Science, English, Social studies and computer science).

**Tools of data collection:-**Two tools were used by the researchers to obtain the necessary data

#### **Tool I: structured questionnaire sheet**

A structured questionnaire sheet which was developed by the researchers based on thorough review of literature was used. This tool comprises the following parts:-

**Part (1): Socio-demographic characteristics of the teachers** which covers data about the teachers' age, sex, marital status, number of their children , qualification, years of teaching experience, place of work ,previous work shops in the field of learning difficulties its number and date, total number of children in their class and number of children with learning difficulties.

#### **Part (2)**

Teacher's knowledge about learning difficulties in relation to its meaning, causes, types and characteristics of the child with learning difficulties.

#### **Part (3)**

Teacher's reported strategies in dealing with children in their classes which cover the following items:

- Create a cooperative atmosphere between the pupils and the teacher
- Detect the weak and strength points that the child has.
- Use the different audiovisual aids according to the need.
- Consider the individual differences between the pupils.
- Assigned special activities to the child with specific difficulties.
- Use different educational methods according to situations.
- Identification of the pupils with learning difficulties through the observation of their behaviors and performance of different skills used in Arabic language and mathematic subjects.
- Put an individual educational plan for pupils with learning difficulties.
- Conduct periodic meeting with the parents of the pupils with learning difficulties to inform them with the pupil's condition and the difficulties that they suffering and how to overcome these difficulties.
- Make a report about those pupils to the school administration for action.

#### **Tool II: The Opinion Relative to Integration Scale (ORI)<sup>(25)</sup>**

The scale of Opinions Relative to the Integration (ORI) of Students with Disabilities (Antonak & Larrivee, 1995) was utilized to assess the teacher's attitudes toward child with learning difficulties. The (ORI) scale was originally developed by Larrivee and Cook (1979), and revised by Antonak and Larrivee (1995). The revised ORI consists of 25 items, 12 of which are negatively worded; the other 13 are positively worded. According to Antonak and Larivee (1995) scores on the ORI ranged from 0-150. The teachers considered to

have a negative attitude toward integration of students with disabilities if they had scores less than 75. Positive attitude is considered if the teachers' scores are 75 or more. The closer teachers' scores are to 150 the stronger the support is for students with special needs to be included in regular education settings.

## **Methods**

### **1- Obtaining approvals.**

Official permission to conduct the study was obtained by the researchers from faculty of nursing Tanta University, directed to the Directorate of Education, Elgharbia Governorate and from it to the educational zones in El-Mehalla El Koubra and then to identified schools' directors and headmasters to obtain their approval and cooperation for carrying out the study.

### **2- Developing the tools.**

The structured interview questionnaire sheet was developed based on literature review and was translated into Arabic version by the researchers. The developed and translated tool was distributed to a jury of 5 academic professors in community health nursing department, public and preventive medicine department of faculty of medicine and department of psychology of faculty of education to test its content and face validity. Accordingly, corrections and modifications were done. A pilot study was carried out on (about 10 % of the target sample) (n= 45 teachers) to test the tool for relevance, clarity and reliability. Those teachers were later excluded from the study sample. Cronbach's Alpha revealed reliability of the translated Arabic tool which is .664.

### **3- The actual study**

- The collection of the data continued during a period of three months starting from October until the end of December 2014.
- Informed consent was obtained from the chosen teachers to participate in the study and informed them about the purpose of the study and the confidentiality of any information given to the researchers.
- The studied teachers were met in teachers' room of the selected schools. The data was collected by administering the questionnaire sheet to each teacher individually to complete it by his/herself with the attendance of the researchers to offer guidance and clarification when needed.
- The total knowledge scores of the studied teachers regarding learning difficulties was classified into three categories as follows:
  - \*Good:  $\geq 70\%$  of the total score.
  - \*Fair:  $50\% - < 70\%$  of the total score.
  - \*Poor:  $< 50\%$  of the total score.
- The total reported practice scores of the studied teachers regarding learning difficulties was classified into three categories as follows:
  - \*Good:  $\geq 70\%$  of the total score.
  - \*Satisfactory:  $50\% - < 70\%$  of the total score.
  - \*Poor:  $< 50\%$  of the total score.
- The total attitude scores of the studied teachers regarding inclusion of the students with learning difficulties was classified into two categories as follow:
  - \* Negative attitude; less than 75 of the total score.
  - \* Positive attitude; 75 or more of the total score.

### **4- Statistical analysis**

The data were coded, entered and analyzed using SPSS (version 20). Descriptive statistics (frequency numbers Percentages and  $X^2$ ) identified demographic characteristics and teachers' responses to the questionnaire. Paired t / F tests were used to analyze the relationships; statistical significant was set at P value  $< 0.05\%$ . Spearman correlation was used to examine the correlations between Knowledge, reported practice and attitude total scores with teachers' age and years of experience.

## **IV. Results**

**Table (1) represents the distribution of the studied sample according to their socio-demographic characteristics.** Regarding the age distribution of the studied groups, It was clear that nearly half of the study sample in both two settings (rural and urban) were in the age group of 34 - 43, (40.7% and 46% respectively) with a mean ages (40.3122 $\pm$  7.58) and (38.7143  $\pm$ 7.71) years respectively. More than half of rural group (56.1%) and nearly half of urban group (49.1%) were male. The majority of the sample in both rural and urban areas was married (97.9 and 86.4 respectively). More than half of the rural subjects (59.7%) had more than three children compared to 43.9 % of urban subjects. Regarding teachers' educational level, this table shows that

more than two thirds of the rural subjects (67.7%) and more than half (55.7%) of urban subjects had education bachelor.

**As for teachers' sources of information, figure (1) illustrates that** the study information was the common sources of information for the majority of both rural and urban subjects (88.4% and 92 % respectively) while workshops and reading were reported only by 20.6 % and 12.7 % of rural subjects respectively compared to 25.1 and 29.6 % of urban subjects respectively.

**Table (2): represents distribution of the studied group according to their occupational characteristics.** This table shows that the majority of both rural and urban subjects (88.4 and 85.4 % respectively) were primary school teachers. Regarding number of children in the class, it was found that, more than half of the rural subjects (54.5%) reported that they had more than fifty students in their classes compared to more than half of urban subjects (55.4%) who reported that the number of children in their class ranged between 35-50 students. The mean years of experience for rural teachers was ( $15.8942 \pm 9.08584$ ) compared to a mean of ( $13.9408 \pm 8.25$ ) for urban subjects. The years of experience were more than ten years for more than two thirds (67.7 %) of rural subjects and more than half (57.1 %) of the urban subjects. Furthermore, this table shows that, more than half (61.4%) of the studied sample in rural area compared to only 24.7% of the studied sample in urban area had previous work shop in learning difficulties, and about one third of the rural subjects (33.9%) had only one work shop in learning difficulties, compared to 9.1% of urban subjects. The highest frequencies of both rural and urban subjects had the work shop since more than 6 months (41.3% and 20.6% respectively). Concerning presence of children with learning difficulties in their class, the majority of the studied groups in both rural and urban areas (91% and 75.6% respectively) reported that they had a number of children with learning difficulties in their classes, Less than half of the rural subjects and more than one third of the urban subjects (47.1% and 36.9% respectively) reported that the number of those children with learning difficulties ranged between 5-10 children. Moreover, this table shows that there were significant differences between teachers in rural and urban areas in relation to their years of teaching experience, workshops in learning difficulties, its number and date, presence of children with learning difficulties and number of children with learning difficulties ( $p < 0.05$ ).

**Table (3) represents distribution of the studied groups according to their score of knowledge, practice and attitudes toward learning difficulties.** This table shows that about two thirds of the rural subjects and about two fifths of the urban subjects (60.8% and 39.4 % respectively) had fair score of knowledge about learning difficulties, their mean scores of knowledge were ( $32.95 \pm 6.92$  and  $31.41 \pm 9.22$  respectively). There was a significant difference between rural and urban subjects in relation to their knowledge score ( $p < 0.05$ ). As regard the reported practice, the highest proportion of both rural and urban groups had good score of their reported practices when dealing with children with learning difficulties. No significant differences were observed between the two groups in this regard ( $p > 0.05$ ). As for the teacher's attitudes toward children with learning difficulties, the table shows that, more than half of the rural subjects (56.1%) had positive attitudes toward the children with learning difficulties while about two thirds of the urban subjects (64.1%) had negative attitude toward those children. The table also shows that there was a significant difference between teachers in rural and urban areas in relation to their attitudes score toward children with learning difficulties ( $p < 0.05$ ).

**Table (4) represents motives for teaching the children with learning difficulties.** The table shows that the highest percentages of the rural subjects (86.8%, 77.8%, 77.2 % and 68.3%) respectively and the urban subjects (80.5%, 73.2 %, 76.3% and 65.9% ) respectively stated that social recognition, fair and predictable assessment measures, job security & job satisfaction and satisfactory working conditions are the motives for teaching the children with learning difficulties. No significant differences were observed between the two groups ( $p = > 0.05$ ).

**Table (5) represents items that facilitate teaching the children with learning difficulties.** The table shows that more than three quarters of the rural subjects stated that teachers preparation and small class size are of strong importance to facilitate teaching children with learning difficulties (75.7 % and 77.2 %) respectively compared to (71.1% and 58.9 % ) of urban subjects. In addition, attitude of teachers, teachers planning of time, and incentives to teach LD students were reported by more than half of the two groups of studied subjects as strongly important items that facilitate teaching the children with learning difficulties (59.8%, 54.5% and 52.9 % ) of rural subjects respectively compared to (58.2%, 51.6% and 53.3% ) of urban subjects respectively. Meanwhile, a lower proportion of both rural and urban subjects reported that equal time/attention to all students and reasonable work load among the strongly important items that facilitate teaching for children with learning difficulties (43.9%) for rural subjects respectively and (36.2% and 33.4%) for urban subjects respectively.

**Table (6): Shows the reported teaching strategies used for teaching students with learning difficulties.** It was found that the higher proportion of teachers in both rural and urban areas (more than 80%) reported that they use most of the teaching strategies (11 out of 18 teaching strategies) in teaching the children with learning difficulties. A lower proportion of both rural and urban subjects reported that they don't give the students hints or answer when teaching them (32.8% and 24%) respectively. Generally, the table shows that

there were significant differences between both rural and urban subjects regarding the following reported teaching strategies; allow silent period between question and answer, provide written outline of talk and pre-plan lessons ( $p < 0.05$ ).

**Table (7) represents the age and sex distribution of studied group in relation to mean of total knowledge, practice and attitude score.** Significant statistical difference was observed between the age of rural subjects and their knowledge score ( $p < 0.05$ ). The older teachers  $\geq 54$  years had more knowledge than the younger teachers as indicated by their higher mean score ( $39.35 \pm 7.44$ ). On the other hand, the age of the teachers had no effect on their reported practice and attitudes. As regard the urban subjects, it was clear that age significantly affecting their knowledge and reported practice ( $p < 0.05$ ). The younger teachers were more knowledgeable than the older teachers as indicated by their mean score ( $35.30 \pm 7.66$ ), while the older teachers were more efficient as indicated by their mean practice scores ( $18.55 \pm 0.88$ ). Furthermore, teachers' age had no effect on the attitude of the urban subjects. As regard the effect of sex, it was clear that sex had no effect on both rural and urban subjects' knowledge, practice and attitude. No significant differences were observed ( $p > 0.05$ ).

**Table 8: shows mean of total knowledge, practice and attitude score in relation to years of experience and occupation of studied group.** It was clear that the years of experience and teachers' occupation of rural subjects had no effect on their knowledge, reported practice and attitude. No significant differences were found. On the other hand, the urban subjects showed significant difference between their years of experience and knowledge scores ( $p < 0.05$ ) where the teachers who had 5-10 years of experience their knowledge was more than other teachers as indicated by their mean knowledge scores ( $34.01 \pm 7.89$ ) while years of experience had no effect on the teachers' reported practice and attitude. Also, it was clear that the teachers' occupation had no effect on their knowledge, reported practice and attitude. No significant differences were observed ( $p > 0.05$ ).

**Table (9) shows the correlation between age, year of experience and total knowledge, practice and attitude scores.** It was found that there was positive correlation between age of the studied sample and their years of experience and total score of reported practices ( $r = 0.888$  and  $0.139$  respectively) and negative correlation with total score of knowledge and attitude about learning difficulties ( $r = -0.182$  and  $r = -0.023$ ) respectively. Regarding correlation between years of experiences of the studied sample and reported practices there was positive correlation ( $r = 0.243$ ) and negative correlation with total score of attitude ( $r = -0.059$ ). Also, there was positive correlation with total score of knowledge and total score of reported practices and attitudes of studied sample regarding learning difficulties ( $r = 0.243$  and  $r = 0.150$ ).

## V. Discussion

Egypt has made significant progress towards achieving the Education for All and the Millennium Development Goals (MDGs), particularly in expanding access to basic education. Difficulties with academic achievement fall under a broad category of learning problems<sup>(10, 26)</sup>. If the learning difficulties are unnoticed, ignored and such children's needs are not met in regular class rooms or special education within the school, the learning disabled children will grow up feeling inadequate. Teachers play an important role in any educational system. At primary level, the teachers should play a vital role in identifying children with learning difficulties early and with help they may be able to achieve and succeed<sup>(5,10)</sup>. The right type of teacher with right type of knowledge; skills or competencies and positive attitude can do better justice to the children with learning difficulties<sup>(5, 11)</sup>. This study aims to investigate the teachers' knowledge, attitudes and reported strategies to assess and support the students with learning difficulties and compare between the urban and rural teachers in this regard.

As regard the demographic characteristics of the participants, the result of the present study indicated that, more than half of the rural subjects and slightly less than half of the urban subjects were males and mostly of both groups are aged 34-43 years old. Most of the respondent in rural and urban schools are holding education bachelor with relevant teaching experience of more than 10 years. In terms of area of specification, the majority of both rural and urban subjects were primary school teachers and just a few are kindergarten teachers. The majority of rural subjects and more than three fourths of urban subject reported that they have experienced teaching students with learning difficulties in their class rooms. The majority of rural subjects and about one third of urban subjects have attended at least one workshop in learning difficulties compared to only the quarter of urban subjects. These findings were in consistent with that of Dapudong (2014) regarding the age, educational level and years of teaching experience of his subjects. On the other hand, this finding contradict with his finding regarding sex, teaching students with learning difficulties and workshop attendance where he mentioned that the participants' profile shows that there are more females than males and two thirds of the respondents haven't experienced teaching students with disabilities and the majority of them haven't attend any training in special education<sup>(24)</sup>.

Regarding teachers' knowledge about learning difficulties, the result of the current study revealed that about three fourths of the rural subjects and more than two thirds of the urban subjects had fair or poor score of

knowledge about learning difficulties as regard definition, causes, types and characteristics of students with learning difficulties while the rest of them had good scores of knowledge. This finding is supported by other studies that done in this area. They reported that, teachers have an average level of knowledge about the learning disabilities in spite of their gender and teaching experiences which may explained as the teachers were not properly trained to teach the special needs children in an inclusive school particularly the invisible disability as specific learning disabilities<sup>(5, 27, 28)</sup>. Also, this finding is in agreement with that of Robuck (2009) who alleged that general education teachers usually have very little knowledge about learning disabilities in general and Dapudong (2014) who found that teachers have moderate knowledge on inclusive education as a way of reducing social discrimination and as integration of special educational needs students in mainstream classrooms while exhibited partial knowledge on inclusive education as a system of education for all where there is a need to educate everyone irrespective of race, creed, gender, and socio-economic status. Over all, the international school teachers exhibited moderate knowledge on the concept of inclusive education at an international level<sup>(14, 24)</sup>. In the same line, Fatafi (2007) proved that teachers in most cases don't have an appropriate awareness of the cause and nature of learning disability<sup>(29)</sup>. However, this finding was on the contrary with the results of Jeromey (2007) and Kelvan et al. (2012), who revealed that the teachers have a good knowledge about the nature of learning disability<sup>(22, 30)</sup>. Additionally, the finding is disagree with that of Westwood (2008) who claimed that early childhood teachers are skilled in noting when young children are having learning problem<sup>(4)</sup>.

As for the teachers' reported practice, the finding of the current study revealed that the highest proportion of both rural and urban groups had good score of their practices when dealing with children with learning difficulties which may be explained as the teacher were choose the ideal answer not the answer that reflect their actual practice as they consider it as an evaluation tool despite emphasis on the confidentiality of their responses. This result was agree with the finding of Abercrombie (2009) who mentioned that the participants reported using a variety of teaching strategies to teach students with learning disabilities in their class rooms<sup>(31)</sup>. Also the results of the present study shows that the majority of the teachers in rural and urban areas reported that allow active participation of the child, create cooperative atmosphere, speak slowly, clearly, and naturally, pre-plan lessons, and identify strength and weak point as teaching strategies used when teaching students with learning difficulties. The findings of the study done by Adebowale and Moye (2013) found that the teachers were found to be adopting some basic coping strategies to manage their classroom and their students to enable the learners trap enough knowledge. These mainly consisted of placement in the classroom, teacher moving round to spot any form of learning difficulties and ensuring that the child's self esteem is not battered<sup>(1)</sup>. This confirms the view expressed by Robuck (2009) that the solution teachers usually offer to assist children with learning difficulties are usually focused on the child rather than the teachers themselves. He advised that teachers can successfully reduce or eliminate a child's difficult behavior with a simple change in the way he/she presents information, provides assistance, or alters the way the child can demonstrate performance of academic tasks<sup>(14)</sup>.

Attitudes of regular classroom teachers towards educational inclusion are considered a central point to include students with disabilities in regular schools<sup>(32)</sup>. An educator with negative attitudes toward a student's ability to learn is very likely to influence how that student is going to feel about his or her learning experience. Negative attitudes can also influence the way the teacher is going to treat his or her students in other contexts<sup>(24)</sup>. As regard the teacher's attitude toward teaching children with learning difficulties, the current study indicates that there exists significant difference in urban and rural teachers' attitude toward teaching the children with learning difficulties. The mean score of rural teachers' attitude is  $(75.69 \pm 11.84)$  which is greater than the mean score of urban teachers' attitude  $(70.83 \pm 13.16)$ . So, it can be interpreted that the rural teachers' attitude is more positive in comparison to urban teachers. This may be explained as the rural teachers are more sociable and closer to the students and their families so, they feel the responsibility for all children.

The result of the present study is disagree with the result of Dupoux et al (2006) who reported that, their findings indicated that teachers in rural areas did not differ from teachers in urban areas in their attitudes toward integrating students with disabilities. In fact, both groups of teachers had a moderate level of acceptance of students with disabilities<sup>(33)</sup>. In the same line, Chopra (2008) reported that the urban teachers' attitude towards inclusive education is more positive in comparison to rural teachers. She attributed this to the fact that the urban teachers' are more aware about inclusive education because in urban schools there are more facilities for inclusive education and all the teachers using internet and media are more aware than rural teachers<sup>(34)</sup>.

The findings of the present study found that there was significant and negative correlation between the age of the studied sample in rural and urban areas and their score of knowledge and reported practice about learning difficulties which may be attributed to the new concept of inclusive education and the increased interest of learning difficulties that did not exist before. Meanwhile, no significant differences were found between age of studied sample in rural and urban areas and their score of attitude. In addition, Significant and positive correlations were observed between the teachers' knowledge and practice and their teaching years of experience. These findings were in consistent with the finding of Kelvan et al., (2012) who found that there are significant

differences between gender and years of teaching experience of teachers with the knowledge of the etiology learning disabilities<sup>(22)</sup>. While, these findings were contradict with Adebowale and Moye (2013) who found that there was no significant difference in the knowledge possessed by respondents on the basis of age or teaching experience<sup>(1)</sup>. Furthermore, no significant correlation was observed between the teaching experience and the teachers' attitude toward learning difficulties which might be due to the reason that both more experienced teachers and less experienced teachers have more knowledge about the children-learning environment because of the present day practice of inclusion of special need children. This finding is agree with the study of Chopra (2008) who found that no significant difference between teachers attitude having more than 10 years and less than 10 years of experience towards inclusive education<sup>(34)</sup>. In the same context, Dupoux et al., (2006) reported that Contrary to expectations, years of experience were not correlated with attitudes toward integration<sup>(33)</sup>.

In relation to the influence of teachers' age, sex, teaching experience and occupation on their knowledge, reported practice and attitude towards inclusion of students with learning difficulties, it was clear that teachers' age is significantly affecting the knowledge level of both urban and rural subjects. Also, it has a significant influence on the practice strategies reported by the urban teachers. On the other hand, the teachers' age has no effect on attitudes of both groups while sex significantly affects the urban teacher's attitudes only. The mean score of male teachers was greater than mean score of female teachers. In addition, only the knowledge of the urban subjects was significantly affected by the teaching experience where teachers' occupation has no effect on their knowledge, reported practice or attitudes. These findings are in consistent with the Chopra (2008) who reported that there was no significant difference between the teachers' attitude and teaching experience, additionally, she reported that there exists significant difference in the male and female elementary school teacher's attitude towards inclusive education. The mean scores of the male are greater than the mean scores of female teachers. So, it can be interpreted that the male teachers' attitude are more positive towards inclusive education as compared to their counterparts. It might be due to the reason that the male teachers are more aware about the inclusive education rather than their female counterparts<sup>(34)</sup>.

Furthermore, this results were in agreement with the study conducted by Dukmak(2013) found that teachers showed supportive attitudes towards inclusion, and male teachers had more supportive attitudes towards inclusion than females did. Teachers' age was not relevant to their attitudes towards inclusion while their years of experience were negatively correlated with their attitudes towards inclusion<sup>(32)</sup>. According to Florian (2012), many general classroom teachers in Scotland resist to include children with special needs in their classes believing that inclusion interferes with the effective education of other students<sup>(35)</sup>. In another study conducted by Zoniou-Sideri and Vlachou (2006) on Greek teachers' beliefs towards educational inclusion, the results revealed that regular education teachers hold a number of restrictive as well as conflicting beliefs towards disability and educational inclusion. These teachers reported that although educational inclusion is necessary as a means of improving the way ordinary school functions and reducing the marginalization and stigmatization of students with disabilities, special segregated education is important as a means of providing a secure and protective shelter to these students and as a way of covering a number of ordinary education's deficiencies<sup>(35,36)</sup>.

The relationship between teachers' attitudes towards inclusion and learning difficulties and their age, gender, and years of experience was investigated in several international and regional studies such as Botswana, Italy, the United Kingdom, UAE and Saudi Arabia. For example, the Botswana study found no significant correlation between attitudes and age (Chhabra et al., 2010)<sup>(37)</sup> while the Italian study found that teachers' attitudes were significantly associated with their age (Cornoldi et al., 1998) in which younger teachers showed more positive attitudes<sup>(38)</sup>. Regarding gender, the studies conducted in Botswana, Italy and China found no significant relationships between teachers' attitudes and their gender<sup>(37-41)</sup> while the studies conducted in the UAE, UK, Nigeria and Saudi Arabia found a significant relationship between the two variables for the favor of female teachers (Algazo & Gaad, 2004; Avramidis et al., 2000; Fakolade & Adeniyi, 2009; Qaraqish, 2008)<sup>(42-45)</sup>. The teachers' years of experience in relation to attitudes was examined in the Nigerian study which found that the teachers' years of experience had no influence on their attitudes towards inclusion<sup>(44)</sup>. The study done by Emam and Mohamed (2011) found that teachers with more years of teaching experience showed less positive attitudes than teachers with fewer years of experience<sup>(46)</sup>. The results of the study done by woodcock (2013) revealed that primary trainee teachers had a moderately higher positive attitude to students with LD (Learning Difficulties) than their secondary counterparts and there were no differences found between male and female trainee teachers in that study<sup>(47)</sup>. The trainee stage of a teaching career is seen as an opportune time to intervene and promote more positive attitudes and beliefs about students and practice<sup>(48)</sup>.

Reddy (2006) opined that the challenge of achieving full educational and social integration of children with disabilities within the society can be easily achieved if the teachers possess better knowledge about disabilities, attitude towards children with disabilities and competencies to handle the children. Since none of the socio-demographic variable could be said to be responsible for the undesirable attitude the teachers were

found to have, their condition of service need to be examined with a view for improving their attitude toward children with learning disabilities<sup>(16)</sup>.

## VI. Conclusion

It can be concluded from this study that the study information was the most common source of knowledge about learning difficulties among the studied sample in rural and urban areas. one quarter and one third of teachers in rural and urban areas respectively had good score of knowledge about learning difficulties, the majority of them had good score of their reported practices regarding children with learning difficulties and nearly half and two third of them had negative attitudes regarding teaching children with learning difficulties. There was positive correlation between age of the studied sample and their years of experience and total score of reported practices and negative correlation with total score of knowledge and attitude about learning difficulties.

## VII. Recommendation

**Based on the findings of the present study, the following are recommended:-**

1. During period of study at faculty of education the teacher preparation should include specialize courses aimed at improving their knowledge and research on learning difficulties in their curricula.
2. Pre employment programs in the field of learning difficulties for preparing teachers especially kindergarten and primary school teachers to deal with all children especially those with learning difficulties.
3. Awareness program about special needs children should be created through mass media to sensitize the problems of these children among teachers.
4. Revamping the teacher education curriculum and introducing a paper on special education as a compulsory paper, providing in-service training programs in special education and remedial teaching strategies.
5. Orientation workshops about learning difficulties should be organized in schools and local education authorities training centers for in-service and novice teachers in order to allow teachers to develop their skills regarding learning difficulties and the management of inclusive classrooms.
6. Emphasizing the compulsory professional training, reduction of workload, assistance, and ratio of teachers per children in the classroom.

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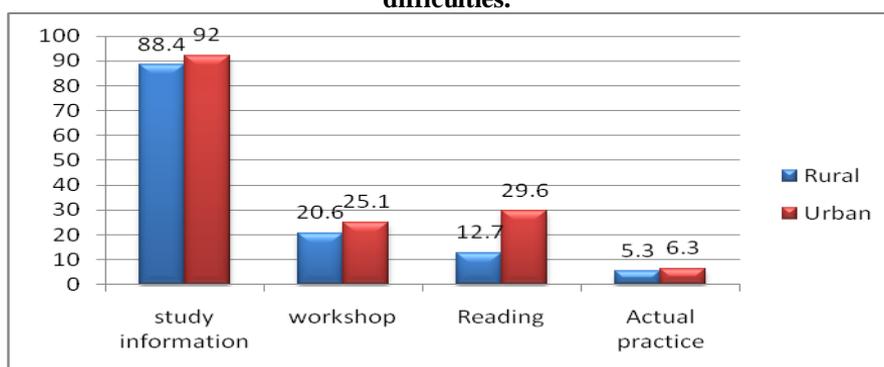
**Table 1: Distribution of the studied sample according to their socio-demographic data**

Variables	Rural = 189		Urban = 287		X <sup>2</sup>	p
	N	%	N	%		
<b>Age in years:</b>					8.440	.038
24-33	43	22.8	79	27.5		
34 -43	77	40.7	135	47.0		
44 -53	55	29.1	64	22.3		
54 or more	14	7.4	9	3.1		
<b>Mean ± SD</b>	40.3122± 7.58		38.7143 ±7.71			
<b>Sex</b>					2.209	.082
Male	106	56.1	141	49.1		
Female	83	43.9	146	50.9		
<b>Marital status</b>					18.786	.001
Single	4	2.1	28	9.8		
Married	185	97.9	248	86.4		
Divorced	0	0	2	.7		
Widow	0	0	9	3.1		
<b>No. of children</b>					22.774	.001
Not present	10	5.3	51	17.8		
1	6	3.3	12	4.2		
2	60	31.7	98	34.1		
≥ 3	113	59.7	126	43.9		
<b>Mean ± SD</b>	2.6508±1.03387		2.1672±1.25			
<b>Educational level</b>					11.531	.009
Diploma parameters	45	23.8	72	25.1		
Education bachelor	128	67.7	160	55.7		
Non education Bachelor	15	7.9	52	18.1		
Post graduate education	1	0.6	3	1.0		

\*Significant at 0.05

\*\* More than one answer

**Figure 1: Distribution of the studied group according to their sources of information about learning difficulties.**



**Table 2: Distribution of the studied group according to occupational characteristics.**

Variables	Rural = 189		Urban = 287		X <sup>2</sup>	P
	N	%	N	%		
<b>Occupation</b>						
Kindergarten teacher	22	11.6	42	14.6	.878	.213
Primary school teacher	167	88.4	245	85.4		
<b>No of students in the class</b>						
less than 35	26	13.5	31	10.8		
35-50	60	31.7	159	55.4		
more than 50	103	54.5	97	33.8		
<b>Mean ± SD</b>	2.4074±.72063		46.9930±10.17			
<b>Years of experience</b>						
< 5 years	26	13.8	34	11.8	9.236	.010*
5-10 years	35	18.5	89	31.0		
> 10 years	128	67.7	164	57.1		
<b>Mean ± SD</b>	15.8942± 9.08584		13.9408±8.25			
<b>Work shop in learning difficulties</b>						
Yes	116	61.4	71	24.7	64.128	<.001*
<b>No of workshops</b>					70.664	<.001*
One	64	33.9	26	9.1		
Two	25	13.2	25	8.7		
≥ Three	27	14.3	20	6.9		
<b>Mean ± SD</b>	1.613±0.488		.5261± 1.09			
<b>Date of work shops</b>						
≤ 6 months	38	20.1	12	4.2	69.690	<.001*
> 6 months	78	41.3	59	20.6		
<b>Mean ± SD</b>	1.026±0.895					
<b>Presence of children with learning difficulties</b>	172	91	217	75.6	18.083	<.001*
<b>No of children with learning difficulties</b>						
< 5 children	58	30.7	89	31	21.221	<.001*
5-10 children	89	47.1	106	36.9		
> 10 children	25	13.2	22	7.7		
<b>Mean ± SD</b>	6.5661±5.70947		4.2091± 3.90			

**Table 3: Distribution of the studied groups according to their score of knowledge, practice and attitudes toward learning difficulties.**

Variables	Rural		Urban		X <sup>2</sup>	P
	N	%	N	%		
<b>Knowledge</b>						
Poor	26	13.8	80	27.9	23.237	0.001*
Fair	115	60.8	113	39.4		
Good	48	25.4	94	32.8		
<b>Mean ± SD</b>	32.9524±6.92842		31.4111± 9.22			
<b>Practice</b>						
Poor	13	6.9	18	6.3	9.043	.011
Satisfactory	18	9.5	57	19.9		
Good	157	83.1	212	73.9		
<b>Mean ± SD</b>	15.6243±3.12193		15.3240± 3.44			
<b>Attitudes</b>					18.873	<0.001*
Negative	83	43.9	184	64.1		
Positive	106	56.1	103	35.9		
<b>Mean ± SD</b>	75.69±11.84		70.83 ±13.16			

\*Significant at 0.05

**Table 4: Motives for teaching children with learning difficulties.**

Motives	Rural		Urban		X <sup>2</sup>	P
	N	%	N	%		
Higher levels of pay and status	95	50.3	157	54.7	.901	.196
Advanced career opportunities	87	46	145	50.5	.920	.193
Fair and predictable assessment measures	147	77.8	210	73.2	1.290	.152
Satisfactory working conditions	129	68.3	189	65.9	.296	.329
Job security, job satisfaction	146	77.2	219	76.3	.057	.451
Interpersonal relationships	119	63	202	70.4	2.857	.056
Social recognition	164	86.8	231	80.5	3.187	.047

\*Significant at 0.05

More than one answer

**Table 5: Items that facilitate teaching to the children with learning difficulties.**

Items	Rural =189										Urban = 287									
	Strongly unimportant		Somewhat unimportant		Undecided		Somewhat important		Strongly important		Strongly unimportant		Somewhat unimportant		Undecided		Somewhat important		Strongly important	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Attitude of teachers	15	7.9	6	3.2	7	3.7	48	25.4	113	59.8	21	7.3	6	2.1	16	5.6	77	26.8	167	58.2
Teacher preparation	3	1.6	3	1.6	2	1.1	38	20.1	143	75.7	16	5.6	10	3.5	6	2.1	51	17.8	204	71.1
Teacher collaboration	2	1.1	3	1.6	9	4.8	49	25.9	126	66.7	21	7.3	7	2.4	12	4.2	68	23.7	179	62.4
Teacher planning time	5	2.6	1	0.5	9	4.8	71	37.6	103	54.5	17	5.9	8	2.8	32	11.1	82	28.6	148	51.6
Administrative support	5	2.6	5	2.6	22	11.6	68	36	89	47.1	22	7.7	16	5.6	27	9.4	79	27.5	143	49.8
Classroom adaptations	2	1.1	10	5.3	11	5.8	38	20.1	128	67.7	23	8	16	5.6	11	3.8	82	28.6	155	54
Positive teacher-parent liaisons	2	1.1	0.0	0.0	7	3.7	57	30.2	123	65.1	8	2.8	21	7.3	22	7.7	80	27.9	154	53.7
Small class size	2	1.1	2	1.1	6	3.2	33	17.5	146	77.2	19	6.6	10	3.5	7	2.4	82	28.6	169	58.9
Additional personnel support	2	1.1	5	2.6	8	4.2	59	31.2	115	60.8	15	5.2	10	3.5	20	7	90	31.4	152	53
Equal time/attention to all students	7	3.7	6	3.2	10	5.3	83	43.9	83	43.9	13	4.5	6	2.1	30	10.5	134	46.7	104	36.2
Reasonable workload	12	6.3	7	3.7	14	7.4	73	38.6	83	43.9	25	8.7	14	4.9	31	10.8	121	42.2	96	33.4
Skills and knowledge in teaching LD students	6	3.2	10	5.3	13	6.9	57	30.2	103	54.5	25	8.7	18	6.3	18	6.3	88	30.7	138	48.1
Motivation to teach LD students	3	1.6	11	5.8	14	7.4	46	24.3	115	60.8	26	9.1	13	4.5	27	9.4	68	23.7	153	53.3
Conducive environment	6	3.2	2	1.1	15	7.9	42	22.2	124	64.6	15	5.2	11	3.8	12	4.2	60	20.9	189	65.9
Incentives to teach LD students	7	3.7	4	2.1	12	6.3	66	34.9	100	52.9	23	8	17	5.9	19	6.6	75	26.1	153	53.3

**Table6: Reported teaching strategies used for teaching students with learning difficulties.**

Variables	Rural		Urban		X <sup>2</sup>	P
	N	%	N	%		
Speak slowly, clearly, and naturally	176	93.1	278	96.9	3.621	0.048
Use shorter sentences	170	89.9	234	81.5	6.284	0.008
Allow silent period between question and answer	153	81	258	89.9	7.730	0.004*
Does not give student hint(s) or answer	62	32.8	69	24	4.386	.024
Consider individual differences	168	88.9	269	93.7	.917	.228
Tell students when making key point	144	76.2	257	89.5	.052	.467
Identify strength and weak point	172	91	261	90.9	.001	.559
Provide written outline of talk	144	76.2	273	95.1	8.618	.002*
Allow active participation of the child	184	97.4	273	95.1	1.482	.164
Pre-Plan lessons	175	92.6	227	79.1	15.815	<.001*
Create cooperative atmosphere	182	96.3	273	95.1	.373	.356
Use variety of instructional methods	158	83.6	233	81.2	.452	.292
Use activities that require physical engagement	153	81	205	71.4	5.544	.012
Identify child with learning difficulties	166	87.8	246	85.7	.439	.302
Put individualized plan for disabled child	136	72	209	72.8	.043	.458
Conduct periodical meeting with parents	128	67.7	223	77.7	5.856	.011
Make reports about the disabled child for school administration	123	65.1	216	75.3	5.764	.011
Try to maintain student's attention	167	65.1	249	86.8	.265	.357

**Table 7: Age and sex distribution of studied group in relation to mean of total knowledge, practice and attitude score**

Variable	Rural			Urban		
	Knowledge	Practice	Attitude	Knowledge	Practice	Attitude
<b>Age in years</b>						
24-33	33.32± 5.75	15.81±2.18	78.69±9.23	35.30±7.66	14.43±3.43	70.97±11.44
34-43	32.23± 7.45	15.01± 3.66	75.62±12.57	30.89±9.31	15.24±3.76	70.62±13.41
44-53	32.03± 6.71	16.3±3.10	73.76±12.52	27.59±8.97	16.14±2.39	71.57±15.17
≥ 54 years	39.35± 4.84	1.78±1.57	74.42±11.35	32.11±10.43	18.55±0.88	6.33±8.36
<b>F</b>	<b>4.915</b>	<b>2.035</b>	<b>1.474</b>	<b>9.233</b>	<b>5.928</b>	<b>0.292</b>
<b>P</b>	<b>0.003*</b>	<b>0.110</b>	<b>0.223</b>	<b>&lt; 0.001*</b>	<b>&lt; 0.001*</b>	<b>0.831</b>
<b>Sex</b>						
Male	33.38±7.44	15.50±3.76	76.49±11.29	31.71±9.95	15.78±3.24	72.79±14.02
Female	32.39±6.21	15.78±2.03	74.67±12.50	31.11±8.48	14.87±3.58	68.93±12.02
<b>F</b>	<b>0.949</b>	<b>0.382</b>	<b>1.095</b>	<b>0.303</b>	<b>5.084</b>	<b>6.268</b>
<b>P</b>	<b>0.331</b>	<b>0.537</b>	<b>0.297</b>	<b>0.583</b>	<b>0.025</b>	<b>0.013</b>

**Table 8: Years of experience and occupation of studied group in relation to mean of total knowledge, practice and attitude score**

Variable	Rural			Urban		
	Knowledge	Practice	Attitude	Knowledge	Practice	Attitude
<b>Years of experience</b>						
Less than 5 years	34.38±6.54	16.57±1.2	79.50±8.50	33.82±8.02	15.55±3.55	69.55±11.16
5-10	33.17±5.87	15.40±2.22	80.54±11.75	34.01±7.89	14.80±3.14	71.48±9.67
More than 10	32.60±7.26	15.49±3.51	73.59±11.93	29.50±9.6	15.55±3.56	70.74±15.08
<b>F</b>	<b>0.735</b>	<b>1.422</b>	<b>6.667</b>	<b>8.657</b>	<b>1.447</b>	<b>0.270</b>
<b>P</b>	<b>0.481</b>	<b>0.244</b>	<b>0.002</b>	<b>&lt; 0.001*</b>	<b>0.237</b>	<b>0.763</b>
<b>Occupation</b>						
Kindergarten teachers	31.22±227	15.13±1.64	80.22±6.63	31.69±5.74	15.30±3.23	73.78±12.45
Primary school teachers	33.17±7.11	15.68±3.26	75.69±12.25	31.41±9.22	15.32±3.84	70.32±13.23
<b>F</b>	<b>1.548</b>	<b>0.607</b>	<b>3.701</b>	<b>0.045</b>	<b>0.001</b>	<b>2.489</b>
<b>P</b>	<b>0.215</b>	<b>0.437</b>	<b>0.056</b>	<b>0.832</b>	<b>0.976</b>	<b>0.116</b>

**Table 9: correlation between age year of experience and total knowledge practice and attitude scores**

Variable	Age in years		Years of experience		Total knowledge score		Total practice score		Total attitude score	
	R	P	R	P	R	P	R	P	R	P
Age in years			.888**	<.001	-.182**	<.001	.139**	.002	-.032**	.484
Years of experience	.888**	<.001			1	<.001	.243**	.014	-.059	.201
Total knowledge score	-.182	<.001	1	<.001			.243**	<.001	.150**	.001
Total practice score	.139**	.002	.243**	.014	.243**	<.001			.094*	.040
Total attitude score	-.032**	.484	-.059	.201	.150**	.001	.094*	.040		