

## A SURVEY OF GENERAL EDUCATION TEACHERS' KNOWLEDGE OF LEARNING DISABILITIES IN JORDAN

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*This study investigated the Jordanian regular education teachers' knowledge of learning disabilities and whether this knowledge differed as a function of selected variables. The sample consisted of 405 regular classroom teachers teaching 1st- to 6th- grade students in 30 schools in three Jordanian districts. Teachers completed a 40-item test designed by the researcher, which had adequate psychometric properties. T-tests for independent samples and ANOVA were used to analyze the survey data. The results of the study revealed that teachers had a moderate level of knowledge of learning disabilities. Female teachers were found to be significantly more knowledgeable than male teachers. Teachers' level of knowledge was unrelated to teachers' age, teaching experience, or academic qualifications. The implications of these findings for inclusion and for future research in Jordan are provided.*

Like many other countries, Jordan has recently become interested in inclusion of students with special needs into regular education settings. Integration/inclusion efforts have been directed toward students with learning disabilities in particular. Students with other special needs (e.g., sensory impairments, mild intellectual and physical impairments) have not received similar attention yet. Although learning disabilities represent pervasive or severe learning difficulties presumed to arise from dysfunctions in the brain that significantly interfere with academic achievement (Hallahan & Kauffman, 2000), educational authorities tend to believe that students having these disabilities do not present major challenges to the school system. After all, learning disabilities are hidden and students having them possess average or above average intelligence (Hallahan & Kauffman, 2000; Mercer, 1997).

That may explain why unlike most students with disabilities who are educated in special settings, students with learning disabilities, in many countries, are commonly educated in regular classrooms. However, inclusion of students with learning disabilities is more complex than it might appear to general education systems. To succeed in school, these students need a range of special support services. Typically, these services have been provided in specialized resource rooms to meet individual needs of students. In Jordan, resource rooms remain the only available service-delivery for students with learning disabilities.

The resource room teacher and the regular classroom teacher must cooperate to establish an appropriate learning environment for each student in both educational settings. Further, efforts should be exerted to overcome barriers that may influence regular education teachers' willingness to include students with special needs in their classes. Some of these barriers are: inadequate professional preparation, lack of information regarding students with special needs, and negative attitudes toward these students (Pivic, McCombs, & Laflamme, 2002).

The movement towards integration/inclusion in Jordan has not been supported by serious efforts to restructure the regular and special education relationship. Pre-service training programs for regular and special teachers have remained separate with little or no relationships. As mainstreaming efforts continued, resource room teachers have been assigned the sole responsibility of supporting students with special needs. Regular classroom teachers, on the other hand, have not been involved in addressing the needs of the included students.

Although extensive research in the last three decades has suggested that for inclusion to succeed regular education teachers should be adequately prepared, little efforts have been exerted in Jordan to assess or enhance regular classroom teachers' knowledge of special educational needs. With the exception of few studies addressing these teachers' attitudes towards inclusion (e.g., Hadidi, 1994; Khatib, 2002), no empirical studies have been conducted on regular classroom teachers' roles in

inclusion. But extensive research in other countries has been carried out on this topic. Generally, research findings have indicated that regular education teachers were not actively involved in addressing the needs of the mainstreamed students (Ammer, 1984; Schultz, 1982).

Research conducted in different parts of the world have found that teachers' acceptance of inclusion may be promoted by educating them about the characteristics and behaviors of students with special needs (e.g., Carroll, 2003; Koay, Lim, Sim, & Elkins, 2006; Lanier & Lanier, 1996; Papadopoulou, Kokaridas, Papanikolaou, & Patsiaouras, 2004; Trent, Pernell, Mungai, and Chimedza, 1998). However, numerous studies have indicated that regular education teachers feel that both pre-service and in-service education programs were inadequate in preparing them for teaching students with learning disabilities in regular classrooms (DeSimone & Parmar, 2006; Wilson, Loprete, & Slostad, 2000). As the success of inclusion of students with learning disabilities partially depends on teachers' awareness of these students' needs (Campbell, Gilmore, & Cuskelly, 2003; Lanier & Lanier, 1996; Papadopoulou, Kokaridas, Papanikolaou, & Patsiaouras, 2004), this study was carried out to investigate the knowledge of Jordanian teachers of learning disabilities.

### *The Research Questions*

This study attempted to answer the following two questions:

1. To what extent do Jordanian regular classroom teachers know the characteristics and needs of students with learning disabilities?
2. Does Jordanian regular classroom teachers' knowledge of learning disabilities differ as a function of teacher's age, gender, academic qualification, or teaching experience?

### *Method*

#### *Design*

The survey research method was used to investigate the research problem formulated in this study. The independent variables were represented by teachers' gender, age, teaching experience, and academic qualification. Teachers' level of knowledge of learning disabilities and level of acceptance of inclusion represented the dependent variables. As known, however, survey research does not establish cause - effect relationships.

**Table 1**

Distribution of Teachers According to Gender, Age, teaching Experience, and Academic Qualification

<i>Variable</i>	<i>Number</i>	<i>Percent</i>
Gender		
Male	223	55.1
Female	182	44.9
Age		
29 Years or Less	130	32.1
30-39 Years	136	33.6
40 Years and Above	109	26.9
Unspecified	30	7.4
Academic Qualification		
Intermediate Diploma	82	20.2
BA	257	63.5
MA	36	8.9
Unspecified	30	7.4
Years of Teaching Experience		
5 Years or Less	134	33.1
6-10 Years	71	17.5
11-15 Years	69	17
16 Years or More	99	24.4
Unspecified	32	7.9
Total	405	100

### *Participants*

A purposefully selected sample of regular education classroom teachers from 30 public schools, working with students in grades first through six participated in this study. All participating schools

had resource rooms for students with learning disabilities. Geographically, these schools were located in the largest three districts in Jordan (Amman, Zarka, and Irbid).

Table 1 reports the distribution of teachers according to gender, age, academic qualification, and years of teaching experience. Data in the Table shows that 55.1% of respondents were males and 44.9% were females. Regarding their age, 65.7% of the teachers were less than 39 years old. With reference to academic qualification, most teachers (63.5% had a BA). Regarding their teaching experience, 33% of the teachers had less than 5 years of experience, 17.5% had from 6-10 years of experience, 17% had 11-15 years of experience, and 24.4% had 16 or more years of experience.

#### *Instrument*

An instrument developed by the researcher and consisting of two parts was used to collect the research data. The first part contained four items related to demographic data. The second part was a 40-item test measuring teachers' knowledge of learning disabilities to which teachers responded using a yes-no format. These items were formulated based on a review of relevant literature (Bender, 2003; Lerner, 1999; Mather & Goldstein, 2001).

To establish the face validity of the test, an initial version of it was given to six faculty members from the Department of Counseling and Special Education, the University of Jordan. They made comments and provided feedback on few items and the changes they suggested were incorporated. Also prior to distribution, the test was piloted on 30 regular classroom teachers working in schools with resource rooms. Those teachers were excluded from the study sample and provided useful feedback that was taken into account in the final version of the test.

Reliability of this test was established using the test-retest method. Pearson's Correlation Coefficient was (.85). Teachers were assured that the study was for scientific purposes only and that their responses were confidential and anonymous. They were urged to respond to all items to the best of their knowledge.

#### *Procedure*

Three research assistants (PhD students in the Department of Counseling and Special Education at the University of Jordan) assisted in distributing copies of the questionnaire. Each copy was accompanied by a letter from the researcher explaining the study and the questionnaire and requesting teachers' participation. Permission to conduct the study was obtained from educational directorates in the three districts prior to distribution of the copies. To increase the teacher response rate, two follow-ups were made by research assistants.

#### *Data Analysis*

A variety of statistical techniques were used to analyze the research data. These techniques included: frequencies, percentages, means, standard deviations, t-tests for independent samples, and one-way analysis of variance (ANOVA).

#### **Results**

The percent of teachers who correctly answered each of the 40 questions comprising the test of knowledge used was calculated. The percent of correct responses to the test items ranged from 93.6% to 15.8%. The mean score obtained by teachers on the total test was 26.13, meaning that teachers demonstrated an acceptable level of knowledge of learning disabilities. It was evident from the data that more than 80% of teachers responded correctly to 13 items out of 40, more than 50% responded correctly to 26 items, and less than 50% responded correctly to 14 items.

The percent of teachers who correctly answered the 40 questions comprising the test of knowledge used according to the four demographic variables was also calculated. T test for independent samples and one way analysis of variance (ANOVA) were used to determine if the apparent differences shown in the data were statistically significant. The results revealed that there were statistically significant differences in teachers' knowledge of learning disabilities attributed to teacher gender ( $T = 2.04, P = 0.05$ ), favoring female teachers (Mean = 26.54) over male teachers (Mean = 25.78). No statistically significant differences in teachers' knowledge of learning disabilities were found according to teachers' age ( $F = 2.34, p = .10$ ), years of teaching experience ( $F = .90, p = .41$ ), or academic qualification ( $F = 1.07, p = .36$ ).

### Discussion and Conclusions

The findings of this study may be encouraging as they indicate that regular classroom teachers in Jordan appear to have acceptable levels of knowledge of learning disabilities. However, such knowledge does not necessarily mean that teachers provide students with learning disabilities in their classrooms with the necessary adaptations and supports. Neither does that mean that teachers cooperate with resource room teachers. In light of this, future studies in Jordan should address such issues.

The teachers who participated in this study had an acceptable level of knowledge in learning disabilities. Since pre-service training programs for regular classroom teachers in Jordan rarely include elements related to children with learning disabilities, their level of knowledge of learning disabilities may be explained in terms of their interactions with special education teachers working in resource rooms in their schools. Also, the three districts occasionally implement training workshops on children with special needs. Some of the teachers who participated in this study may have participated in such training. Additionally, teachers may have gained knowledge about learning disabilities through training workshops, television and radio, friends, and magazines. Future studies should investigate Jordanian regular classroom teachers' experiences with students with learning disabilities and participation in workshops related to learning disabilities. Previous studies have reported that such variables may influence teachers' acceptance and support of inclusion (Campbell et al., 2003; Papadopoulou et al., 2004; Wilson et al., 2000).

There are a number of limitations which may influence the generalization of findings of this study. One limitation is the sample which was not a random sample but a purposefully selected one. Thus, the findings of this study should be interpreted with caution because the sample may not be representative of the larger population of regular teachers. Also, the sample represented a small segment of the teachers selected from specific geographical areas in Jordan and that sample may differ from the teacher population of other geographical areas in the country. Another limitation of the present study was the test used to assess teachers' knowledge of learning disabilities. This test was not a comprehensive one in that it did not cover all basic domains related to learning disabilities. A related limitation was the use of yes-no answer format in answering the test items. Furthermore, this study assessed the knowledge of teachers working in schools offering special education support to students with learning disabilities; its findings cannot be generalized to schools not offering such support. Several thousands of students with learning disabilities are expected to be in regular schools where there is no provision of special education services and where teachers have not been informed of learning disabilities in preservice or inservice training. Thus, future studies addressing teachers working in such schools are obviously needed. Finally, future research needs to use more comprehensive tests and interviews with teachers to verify this study's findings.

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