

Parental Satisfaction with Special Education Services for Students with Learning Disabilities: Riyadh

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Abstract: The aim of this study was to evaluate the level of parents' satisfaction with special education services for students with learning disabilities (LD), and to highlight differences in parents' satisfaction levels. A survey questionnaire was completed by the parents of 491 students with LD at public elementary schools in Riyadh City. The results indicated that parents of students with LD were satisfied ($M=4.04$, $SD=0.85$) with the special education services offered to their children. Examination of differences in parents' satisfaction revealed a number of significant differences attributed to social status, academic level, and involvement in the child's school. Married parents were more satisfied than widowed parents. Parents with less than high school education were more satisfied than parents with more than a bachelor's degree education. Parents with high school education were more satisfied than parents with more than a bachelor's degree education. Parents with a bachelor's degree education were more satisfied than parents with more than a bachelor's degree education. Parents who were involved in the child's school were more satisfied than parents who were not. Implications for future application and research are outlined.

Keywords: exceptional children, special education, parent views, educational provision.

المستخلص: هدفت هذه الدراسة إلى تقييم مستوى الرضا لدى أولياء أمور التلاميذ ذوي صعوبات التعلم حول خدمات التربية الخاصة التي يتلقاها أبناءهم في برامج صعوبات التعلم. وقد أكمل أولياء أمور ٤٩١ تلميذاً لديهم صعوبات تعلم بالمدارس الابتدائية الحكومية بمدينة الرياض استبانة الدراسة. وقد أظهرت نتائج الدراسة رضا أولياء أمور هؤلاء التلاميذ عن خدمات التربية الخاصة المقدمة من خلال برامج صعوبات التعلم. كما أشارت نتائج الدراسة عن وجود اختلافات ذات دلالة إحصائية في مستوى الرضا لدى أولياء الأمور يعزى إلى الحالة الاجتماعية، والمستوى الأكاديمي، والارتباط بمدرسة التلميذ، حيث يتمتع أولياء الأمور المتزوجون بمستوى رضا أعلى من أولياء الأمور الأرمال. أما من ناحية المستوى الأكاديمي، فقد كان مستوى الرضا لدى أولياء الأمور ذوي المؤهل الأكاديمي دون الثانوي أعلى منه لدى أولياء الأمور ذوي المؤهل فوق الجامعي، كما كان أعلى لدى أولياء الأمور ذوي المؤهل الثانوي مقارنة بأولياء الأمور ذوي المؤهل الجامعي، وكذلك أعلى لدى أولياء الأمور ذوي المؤهل الجامعي منه لدى أولياء الأمور ذوي المؤهل فوق الجامعي. أما بالنسبة للارتباط بمدرسة التلميذ، فإن أولياء الأمور ذوي الارتباط بمدارس أبنائهم يتمتعون بمستوى رضا أعلى من أولياء الأمور الذين لا تربطهم علاقة. وقد تم في ضوء نتائج الدراسة تضمين بعض التوصيات.

الكلمات المفتاحية: الأطفال غير العاديين، التربية الخاصة، وجهات نظر أولياء الأمور، الاستعدادات (التدابير) التربوية.

Introduction

The concept of learning disabilities (LD) includes heterogeneous disorders that manifest as difficulties in one or more academic areas (e.g., reading, writing, or mathematics), and are presumably of biological origin and related to the functioning of the central nervous system (Lerner & Kline, 2012). Although students with LD have an average intellectual ability, they face significant unique problems in academic areas (Heward, 2006).

LDs exist as distinct handicapping conditions and vary in manifestation as well as degree of severity (e.g., mild, moderate, or severe). Throughout the life of individuals with LD, the condition can affect self-esteem, education, vocation, socialization, and/or daily living activities (Association for Children with Learning Disabilities, 1986).

The concept of LD is relatively new in Saudi Arabian schools, and did not exist in the Saudi educational system until 1992 (Almosa, 1999). Moreover, academic difficulties faced by students with LD and problems encountered by their parents were not addressed. They were viewed instead as a personal issue. In addition, school personnel considered parents to be in need of educational services for their children with LD. This situation changed in 1993, when the Ministry of Education initiated special education services for students with LD. The Ministry established a small number of LD programs (resource rooms with LD teachers) in some public elementary schools (Almosa, 2000; Abu Nayyan, 2000). This led to demonstrations of increased interest from both parents and educators. The field of LD has developed over the last fifteen years from being an unknown area to one in which there is a constant increase in the prevalence and number of educational programs in elementary public schools constantly. LD resource rooms have been established in most elementary public schools across the Kingdom of Saudi Arabia to serve students from the first to sixth grade (Ministry of Education, 2012a; Almosa, 2004).

Resource rooms in elementary schools were established to remediate students' academic problems in basic areas (Abu Nayyan, 2000; Asartawy, Asartawy, Kashan, & Abujodah, 2011). Students with LD are usually referred to

an LD program when they are unable to learn in the regular classroom without special education services (Lerner & Kline, 2012; Bender, 1992). However, resources may be withdrawn for part of the school day, and thus students with LD are also often educated in general education classrooms (Hallahan & Kauffman, 2006; Bender, 1992). Within the Saudi Arabian educational system, students with LD comprise one of the largest populations of students receiving special education services in public schools. According to the Ministry of Education (2012a), there are 1285 LD programs with approximately 17,732 students with LD receiving special education services in elementary schools.

Coinciding with a notable increase in the prevalence of students with LD and their programs, there has also been a growing effort by the Ministry of Education to involve parents in the education of their children with LD. This is in contrast to their earlier dependent role. A number of legislations were enacted to give parents the right to be included as partners in the decision-making processes related to educational programs for their children. Thus, the educational goals of LD students are met through educational teams that encompass parents' membership (Ministry of Education, 2002).

Parents' involvement in their children's education influences students' academic improvement and was found to be correlated with a higher level of satisfaction (Office of Educational Research and Improvement, 2004; Miedel & Reynolds, 1999). Some countries consider parents' involvement as a national goal. For instance, the U.S. Department of Education (1999) stated that "increasing the involvement of parents in the education of their children is a national goal for policy makers in both general and special education" (p. I-1). Therefore, schools' practices should encourage and facilitate parents' participation and involvement. In the area of special education, parent participation and involvement can occur across different contexts, e.g., communication, parent-teacher conferences, and individualized education plan (IEP) meetings (Fantuzzo, Perry, & Childs, 2009).

Parents' satisfaction is an important factor for evaluating special education services (Johnson & Duffett, 2002). Research on parents' satisfaction with services for special needs students has received much attention in Western literature. Many researchers have investigated the level and nature of parents' satisfaction with special education services (e.g., Zablotsky, Boswell & Smith, 2012; Stallard & Lenton, 1992). Although much work has been done, a clear and widely accepted definition of satisfaction does not exist. In some studies, satisfaction has been described as a perception, attitude, or view (Samioti, Papanis, & Giavrimis, 2011). However, satisfaction can be defined as the number of personal perceptions regarding service provision (Tselepi, 2000, cited in Samioti et al., 2011). Lannert and Mombaerts (2000) provided an operational definition for the concept of satisfaction as follows: "Satisfaction is the difference between the expectation of the parents about services of LD programs and real service delivery" (p.62).

Regarding the level of parental satisfaction, Starr, Foy, Cramer, and Singh (2006) surveyed the parents of 209 children with LD, Down's syndrome, and autism about their perceptions of their children's education. Group differences were observed for a number of items. In almost every case, the LD group rated the items significantly lower than one or more of the other groups. Results indicated many significant differences between what parents felt their children needed to achieve their potential across diagnostic groups and what they felt was being offered.

In addition, Al Khateeb and Hadidi (2009) investigated the satisfaction of 135 LD teachers and 190 mothers of children with LD who participated in resource room programs in Jordan. The teachers reported moderate satisfaction while the mothers were very satisfied. However, mothers were satisfied with the academic improvement of their children and least satisfied with the school's communication.

Parents' satisfaction with services for pre-school children has also been examined. For example, Stallard and Lenton (1992) examined the satisfaction of parents with the services of pre-school children with special needs attending local opportunity playgroups. Results found an

overall high level of satisfaction, although parents felt they had not received as much information as they wanted on their child's condition (29%), available help for their family (44%), financial benefits (61%), or information about their child's future. Families also felt that they had not received enough family support (43%), and that professional staff regularly did not understand their concerns (32%).

Parsons, Lewis, Davison, Ellins, and Robertson (2009) investigated parents' satisfaction with educational provision for students with special education needs. A sample of diverse parents (N=562) was surveyed on key aspects of educational provision such as the choice of school and influence of attitudinal and environmental factors. Results revealed a largely positive view of educational provision. The main exception was parents of students with psychosocial difficulties in mainstream schools, were the least satisfied with educational provision.

The relationship between parent's satisfaction regarding partnerships with professionals and the child's age was also evaluated by Summers, Hoffman, Marquis, Turnbull, and Poston (2005). A total of 147 parents completed the scale to describe the perceived importance of and satisfaction with 18 aspects of their child's and family's relationship with their primary service provider. No differences emerged for importance rating among parents of children aged from birth to 3 years, 4 to 5 years, or 6 to 12 years, although there were differences for satisfaction rating, with parents of older children reporting less satisfaction.

In a study comparing the involvement and satisfaction level of parents of children with autism spectrum disorder and parents of children without the disorder, Zablotsky et al. (2012), in a national sample of families (N=58,978), found that parents of children with the disorder were more likely than parents of non-autistic children to attend parent-teacher conferences, meet with school guidance counselors, and help with homework. The parents of children with autism spectrum disorder were also more dissatisfied with the level of communication provided by the school.

Clearly, evaluating parents' satisfaction with services is essential in examining special education services because it can positively influence educational programs and provide information to improve the services offered (Ziviani, Cuskelly, & Feeney, 2010; McNaughton, 1994). In addition, parents' satisfaction has been identified as an important indicator of program quality and effectiveness (Wise, 2003; Bailey & Simeonsson, 1988).

LD programs in Saudi Arabia have been established and enhanced for elementary students in recent years. In addition, the Ministry of Education has indicated that parents of students with disabilities should be included in the decision-making team in all special education processes. However, the level of parents' satisfaction with LD services in Saudi Arabia remains understudied. Thus, examining parents' satisfaction with LD services and understanding their levels and differences have become essential. Based on these considerations, an effort has been made in this study to close the gap by evaluating parents' satisfaction with services for students with LD. The purpose of this study is to examine the level of service satisfaction among parents of students with LD and highlight eight variables of parents' background characteristics and practices related to their children's education that may affect parents' satisfaction. To achieve this purpose, the following research questions need to be answered:

1. What is the level of parents' satisfaction with services for students with LD?
2. Are there any significant differences in parents' satisfaction with services for students with LD based on parents' background characteristics?

Method

Procedure

The sample was selected from elementary schools that offer LD programs in Riyadh City. To select a representative sample, lists of data containing the entire population of students with LD (4446) enrolled in LD programs in public elementary schools in Riyadh City in the school year of 2011–2012 (Ministry of education, 2012b) were used. The sample was stratified to represent 10 educational offices located in different areas. To ensure the representativeness

of the population, after the identification of the 10 educational offices, six random elementary schools within each educational office were approached. Employing this sample frame, a random representative sample of 809 students with LD was identified.

Official permission was obtained in advance from the Administration of Education in Riyadh City to approach the selected elementary schools that offer LD programs and collect the data. The principals of the selected schools were then contacted to ask if the LD teachers in these schools were allowed to distribute the questionnaire package. This package, to be taken home by all students (first through sixth grades) attending LD programs, included a cover letter, personal information sheet, and a satisfaction scale. The parents of students with LD were asked, if they intended to participate, to complete the demographics sheet along with the satisfaction questionnaire, and return it by their children to school. One week later, a reminder letter and new survey were sent to the students' parents. Surveys were collected and forwarded to the researcher. This procedure produced a total of 502 returned surveys. Eight surveys were excluded from the data analysis as each had more than 6 missing values out of the 24 items. Outliers were also examined and three were removed. The sufficient data consisted of 491 surveys for a response rate of 60.7%. The collected data was coded, entered into a computer, analyzed using SAS (2009), and the results reported.

Participants

Table 1 displays the background independent variables for the participants. Frequency of missing values is also reported. Out of the majority of legal guardians, 341, or more than two thirds (69.45%), were fathers, while 112 (22.81%) were mothers, and 32 (6.52%) respondents considered themselves as other, e.g., an older brother, grandfather, or uncle. Most respondents, 432 (87.98%), were married, 26 (5.30%) divorced, and 17(3.46%) widowed.

The reported monthly income of participants included 59 (12.02%) who earned less than SR5,000, while 365(74.34%) reported an income between SR5,000 and 10,000, and 45

(9.16%) earned more than SR10,000. Regarding the academic levels of parents, 144 (29.33%) had less than a high school education, 172 (35.03%) had completed high school, 145 (29.53%) had obtained a bachelor's degree, and 20 (4.07%) had obtained more than a bachelor's degree qualification. Among the participants, 370 (75.36%) indicated that they help their child study at home, while 118 (24.03%) said they do not. With regard to being involved in the child's

school, 325, or approximately two thirds (66.19%), responded yes, and 155, or slightly less than one third (31.57%), responded no. Out of the students with learning disabilities whose parents participated, 341 (69.45%) were in grades 1, 2, or 3, and 106 (21.59%) were in grades 4, 5, or 6. In terms of students' degree of LD, 135 (27.49%) were characterized as mild, 300 (61.10%) as moderate, and 41 (8.35%) as severe (see Table 1 for more details).

Table 1: Background characteristics of parents (N=491)

Variable	Response	Frequency	Percentage
Legal guardians	Father	341	69.45
	Mother	112	22.81
	Other	32	6.52
	Missing	6	1.22
Social status	Married	432	87.98
	Divorced	26	5.30
	Widow	17	3.46
	Missing	16	3.26
Income class	<SR5000	59	12.02
	SR 5000–10000	365	74.34
	>SR10000	45	9.16
	Missing	22	4.48
Academic level	Under high school	144	29.33
	High school	172	35.03
	Bachelor's	145	29.53
	Above bachelor's	20	4.07
	Missing	10	2.04
Helps child study at home	Yes	370	75.36
	No	118	24.03
	Missing	3	0.61
Involved in child's school	Yes	325	66.19
	No	155	31.57
	Missing	11	2.24
Child's grade	1, 2, or 3	341	69.45
	4, 5, or 6	106	21.59
	Missing	44	8.96
Degree of the child's learning disability	Mild	135	27.49
	Moderate	300	61.10
	Severe	41	8.35
	Missing	15	3.05

Instrument

The survey questionnaire used in this study comprised two sections: personal information (e.g., the child's grade, parents' social status, income, and academic level) obtained through explicit questions, and a satisfaction scale that included 24 items. The scale was based on the literature review on educational programs and services for students with LD as well as research on parents' collaborative relationships with school personnel (Gable, Mostert, & Tonelson, 2004; Voltz & Euiott, 1990). In addition, some

satisfaction measures and their developmental methods were reviewed (Lanners & Mombaerts, 2000; Summers et al., 2005; Ziviani et al., 2010). The rating scale required parents to indicate their level of satisfaction with the LD services provided to their children. It was self-administered and the response for each item was a 5-point Likert format: 1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, and 5=very satisfied.

The development of the scale comprised two steps. First, common areas in special

education programs for students with LD, including identification and eligibility for special education services, IEP development, instruction and student achievement, and collaborative relationships (Lerner & Kline, 2012) were identified. Second, items covering the potential benefits of services and related to parents' satisfaction were generated to represent all areas.

After initial development, the scale was reviewed by six professors at the Department of Special Education in the College of Education at King Saud University to ensure that the items were clear, precise, and adequate. Consequently, eight items were modified. In addition, to ensure that parents understood the items, it was piloted on four parents to obtain feedback on the ease of completing the scale and the clarity of instructions. The pilot study revealed that some items were difficult to understand. The scale was again restructured in terms of language, and unclear items were clarified and corrected. These processes resulted in the final survey questionnaire, which comprised 24 items (q1–q24). Then, a field test was conducted with 15 parents to ensure reliability, and Cronbach's coefficient alphas were calculated. Results revealed the reliability coefficient was .82 for the scale.

The instrument was developed in Arabic language, and for the purpose of publishing the study in English, the instrument was translated from Arabic to English through back translation by two bilingual individuals (working independently). The first translator translated the instrument from Arabic to English, and then the second translated it back from English to Arabic. The two forms were compared, and any differences in meaning were noted and revised accordingly (Prieto, 1992).

Design and statistical analysis

This study was quantitative in nature, and used a survey design. Data for 491 subjects were analyzed.

For the purpose of data analysis, descriptive statistics were generated to present the characteristics of the data and the parents' satisfaction scores. For the dependent variable (parents' satisfaction scores), one-way ANOVA was proposed to investigate the effects of the independent variables (legal guardians, social status, income class, education level, helping the

child study at home, involvement in the child's school, grade of child, degree of child's disability). The F test was applied to test if the effect of a term might be statistically significant, under the assumption that sampled populations are normally distributed. In addition, if the effect was statistically significant, Tukey's post-hoc tests were performed to investigate which groups differ from each other. A *p*-value less than 0.05 indicates that the effect is statistically significant.

Study Results

Research question 1: What is the level of parents' satisfaction?

The answer to the first question of this study can be determined through the mean scores of parents' satisfaction. Table 2 presents the frequency counts and percentages for responses to the scale items (q1–q24), mean, and standard deviation (SD).

The means for parents' satisfaction with services ratings for the 24 items on the 5-point response scale (1=very dissatisfied to 5=very satisfied) ranged from 4.41 to 3.65. The overall mean across all 24 items was 4.04 (SD=.85).

For interpreting the mean value of parents' responses, the point on the scale was identified by calculating the range (5–1=4). The range was then divided by the number of scale points (4/5=.80). The result was then added to the lowest point (1) of the scale to calculate the first level.

By continuing this process, the lowest and highest boundaries for each point were obtained (Algahtany, Almethheb, & Alomar, 2011) as follows: 1=very dissatisfied (from 1.00 to 1.80); 2=dissatisfied (more than 1.80 to 2.60); 3=neutral (more than 2.60 to 3.40); 4=satisfied (more than 3.40 to 4.20); and 5=very satisfied (more than 4.20 to 5.00). Therefore, the mean of parents' satisfaction rating ranged between 3.65 and 4.41 with a total mean of 4.04 (SD=0.85), which falls within the satisfaction level (No. 4=more than 3.40 to 4.20), indicating that parents were satisfied with overall services.

Table 2: Response frequencies, percentage, mean, and SD for each item

No.	Survey items	Frequency counts and percentage for responses						Mean	SD
		1=very dissatisfied	2=dissatisfied	3=neutral	4=satisfied	5=very satisfied	Missing		
1	Permission to assess your child	3(0.61)	33(6.75)	137(28.02)	153(31.29)	163(33.33)	2	3.90	0.96
2	Accuracy of assessment tests	14(2.87)	40(8.34)	130(27.14)	155(32.36)	150(31.32)	2	3.84	1.01
3	Results: Reported diagnoses	24(4.94)	29(5.97)	132(27.16)	159(32.72)	142(29.22)	5	3.75	1.09
4	Identification of your child as LD	5(1.03)	18(3.71)	99(20.41)	181(37.32)	182(37.53)	6	4.07	0.90
5	Invitation sent to you to join the IEP team	6(1.23)	27(5.56)	91(18.72)	177(36.42)	185(38.07)	5	4.05	0.95
6	Participation in decision-making about your child's education	10(2.06)	20(4.12)	80(16.46)	161(33.13)	215(44.24)	5	4.13	0.97
7	Cooperation between you and team members	15(3.07)	17(3.48)	85(17.42)	157(32.17)	214(43.85)	3	4.10	1.01
8	Objectives and goals included in your child's IEP	8(1.63)	35(7.14)	75(15.31)	167(34.08)	205(41.84)	1	4.07	1.00
9	Implementation of your child's IEP	13(2.69)	22(4.56)	78(16.18)	179(37.14)	194(40.25)	5	4.09	0.95
10	Information provided to you about your rights as a parent	11(2.25)	30(6.13)	84(17.18)	137(28.02)	227(46.42)	2	4.10	1.04
11	Respect for your values, concerns, and suggestions	5(1.03)	23(4.73)	61(12.55)	183(37.65)	214(44.03)	5	4.19	0.90
12	Your child's social integration with other students	4(0.82)	19(3.89)	61(12.47)	179(36.61)	226(46.22)	2	4.24	0.87
13	Technology used in teaching your child	6(1.24)	15(3.09)	78(16.08)	177(36.49)	209(43.09)	6	4.17	0.89
14	Instruction time given to your child	6(1.23)	17(3.48)	69(14.14)	197(40.37)	199(40.78)	3	4.16	0.88
15	Individual instruction for your child	14(2.87)	26(5.33)	75(15.37)	148(30.33)	225(46.11)	3	4.11	1.04
16	Effectiveness of strategies used with your child	11(2.25)	16(3.28)	74(15.16)	139(28.48)	248(50.82)	3	4.22	0.97
17	Academic improvement of your child	7(1.43)	26(5.31)	124(25.31)	159(32.45)	174(35.51)	1	3.95	0.97
18	Learning independence of your child	6(1.22)	8(1.63)	81(16.53)	199(40.61)	196(40.00)	1	4.17	0.85
19	Test modifications made for your child	12(2.46)	35(7.17)	124(25.41)	171(35.04)	146(29.92)	3	3.83	1.02
20	Conferences with LD teacher	10(2.05)	42(8.61)	128(26.23)	163(33.40)	145(29.71)	3	3.80	1.03
21	Notes sent home	31(6.38)	45(9.26)	122(25.10)	153(31.48)	135(27.78)	5	3.65	1.16
22	Contact with other school personnel	11(2.25)	50(10.22)	114(23.31)	176(35.99)	138(28.22)	2	3.78	1.04
23	Communication with school principal	1(0.20)	15(3.07)	48(9.84)	142(29.10)	282(57.79)	3	4.41	0.81
24	Support network offered by the school	14(2.87)	26(5.34)	68(13.96)	154(31.62)	225(46.20)	4	4.13	1.03

In addition to the descriptive statistics presented in Table 2, the frequency counts and percentage for all responses to the 5-point Likert items are displayed in Table 3. For parents' satisfaction, the results from Table 3 suggest that

more than one third (39.9%) of the respondents were very satisfied, about one third (33.92%) were satisfied, 18.82% were neutral, 5.34% were dissatisfied, and 2.02% were very dissatisfied.

Table 3: Frequency and percentage of parents' satisfaction scores

Variable	Likert scale	Frequency counts and percentage	
		Frequency	Percentage
Parents' satisfaction with special education services	1 = very dissatisfied	9.92	2.02
	2 = dissatisfied	26.20	5.34
	3 = neutral	92.42	18.82
	4 = satisfied	166.54	33.92
	5 = very satisfied	195.92	39.90
	Total	491.00	100.00

Research question2:Are there any significant differences in parents' satisfaction with services for students with LD attributed to parents' background characteristics?

To determine whether there was a significant difference in parents' satisfaction with respect to independent variables, one-way analysis of variance (ANOVA) was implemented for the dependent variables (scores of parents'

satisfaction) and the independent variables (legal guardians, social status, income class, academic level, helping child study at home, involvement in child's school, child's grade, and the degree of child's LD).Table 4 reveals the overall F test ($F=3.40$, $p<0.0001$), indicates that at least one independent variable has a significant effect on the dependent variable (the level of parents' satisfaction).

Table 4:One-way analysis of variance (ANOVA)

Source	DF	Sum of squares	Mean square	F	p-value
Model	14	9557.73	682.69	3.40	< 0.0001
Error	378	75856.16	200.68		
Corrected Total	392	85413.88			

Table 5 shows the results of the individual tests for each effect. The results suggest a significant effect for social status ($F=4.21$, $p=0.0155$),academic level($F=2.67$, $p=0.0474$), and involvement in child's school ($F=4.58$, $p=0.0330$)on the score for parents' satisfaction. However, the results revealed no

significant effect by legal guardians ($F=2.48$, $p=0.0851$), income class($F=1.72$, $p=0.1804$), helping child study at home($F=1.95$, $p=0.1637$), child's grade ($F=0.01$, $p=0.9242$), and degree of child's LD($F=1.53$, $p=0.2186$) on the score for parents' satisfaction.

Table 5:F test for the effect of parents' variables on satisfaction score

Variable	DF	F	P-value
Legal guardians	2	2.48	0.0851
Marital status	2	4.21	0.0155*
Income class	2	1.72	0.1804
Academic level	3	2.67	0.0474*
Helping child study at home	1	1.95	0.1637
Involvement in child's school	1	4.58	0.0330*
Child's grade	1	0.01	0.9242
Degree of child's learning disability	2	1.53	0.2186

*0.05 level of statistical significance

Table 6shows the least squares means. Based on the results of Tukey's post-hoc tests for marital status, the mean scores were significantly different between married (98.18) and widowed (88.14) ($p=0.0146$) respondents; i.e., satisfaction scores were significantly higher for married parents than for parents who were widowed. For parents' academic level, the mean scores were significantly different between less than high school education (95.76) and more than a bachelor's degree education (84.97) ($p=0.0066$), i.e., scores of parents' satisfaction were significantly higher for those with high school than those who had obtained a qualification higher than a bachelor's degree.

The mean scores were also significantly different between bachelor's (94.53) and more than a bachelor's degree (84.97) ($p=0.0129$), i.e., scores of parents' satisfaction were significantly higher for parents with a bachelor's degree than parents with more than a bachelor's degree. In addition, the mean scores for being involved in the child's school were significantly different between parents who were involved in the child's school (94.59) and those who were not (90.83) ($p=0.0330$), i.e., scores for parents' satisfaction were significantly higher for parents who were involved in the child's school than those who were not.

Table 6: Least squares means at each level of social status, academic level, and involvement in child's school variables

Source		Least squares means
Social status	Married	98.18
	Divorced	91.81
	Widowed	88.14
Academic level	Under high school	95.76
	High school	95.58
	Bachelor's degree	94.53
	Above bachelor's degree	84.97
Involved in child's school	Yes	94.59
	No	90.83

Discussion

The primary purpose of the current study was to evaluate whether parents were satisfied with the special education services provided to their children with LD. The results revealed that parents were satisfied with these services ($M=4.04$, $SD=0.85$). In addition, the distribution percentage of parents' responses on the 5-point Likert scale indicated that more than two thirds, or 73.82%, of parents were satisfied with special education services (39.90% were very satisfied and 33.92% were satisfied), while 18.82% were neutral (neither satisfied nor dissatisfied). Out of those parents who were not satisfied (7.36%) with special education services, 5.34% were dissatisfied, and 2.02% were very dissatisfied.

These findings are consistent with certain previous studies, which indicated that most parents of students with disabilities are satisfied with special education services. For example, Leiter and Krauss (2004) found that 83% of parents ($N=1864$) were satisfied with the special education services provided to their children (52% were very satisfied and 31% were somewhat satisfied). Dawson and Kierney (1988) indicated that parents of students with LD scored high for satisfaction. Stallard and Lenton's (1992) study revealed that parents of pre-school children with disabilities had an overall high level of satisfaction. Meyers and Blacher (1987) found that the majority (70%) of parents of children with severe disabilities were either satisfied or very satisfied with all aspects of school programs. Lowenbraum, Madge, and Affleck (1990) indicated that 91% of parents were very satisfied or satisfied with LD programs. Lynch and Stein (1982) found that 76% of parents of students with disabilities were satisfied or very satisfied with the special education services provided.

In contrast, some studies reported that parents of students with LD were less likely to be satisfied when compared to parents of other categories of special needs students. For instance, Starr et al. (2006) found that parents of children with learning disabilities had significantly lower levels of satisfaction than those of children with Down's syndrome or autism spectrum disorder. Parsons et al. (2009) found that parents of students with psychosocial difficulties in mainstream schools were the least satisfied with special education provision, while Alotaibi (2009) found that parents of students with LD were less satisfied than parents of students with physical or intellectual disabilities.

The present study's explanation for level of satisfaction may be that determining eligibility, developing students' IEP, providing appropriate instruction and related services for students with LD, and collaborating with regular teachers and parents are activities often performed by LD teachers, with parents playing a limited role. These practices may suggest that parents have less contact with school personnel, fewer conflicts, and less responsibility for the student, which may increase their satisfaction level. In addition, parents in this study are likely to be happy with services because they lack information regarding the quality of other services and view the services provided to their children as better than nothing (Lanners & Mombaerts, 2000). Parents' satisfaction in the current study could be attributed to cultural factors that encourage parents to accept the disabilities of their children; such factors may affect their satisfaction level positively.

The second purpose of this study was to investigate whether background characteristics affected parents' level of satisfaction. Significant differences in parents' satisfaction

were found. Married parents were found to be more satisfied than widowed parents. This finding is reasonable since a married couple has two individuals at home to share the responsibility of their child's education (Fantuzzo et al., 2009), which can positively affect their level of satisfaction.

It was also found that parents with less than high school education were more satisfied than parents with more than a bachelor's degree education. Parents with high school were more satisfied than parents with more than a bachelor's degree. Parents with bachelor's degrees were more satisfied than parents with more than a bachelor's degree. This finding was similar to that of Alotaibi (2009), who found that illiterate parents (parents who do not read or write) were more satisfied than parents with bachelor's degree or more. These interesting findings in the present study may be attributed to unawareness of their rights. As Leiter and Krauss (2004) explain, "parents may be unaware of their rights or of the services for which their children are eligible, suggesting that parents' expectations of special education may be compromised by what they do (and do not) know" (p.143).

In addition, parents who became involved in the child's school were more satisfied than parents who did not. This finding is logical, and can be interpreted by the significant positive correlation between parental school involvement and parental school satisfaction (Zablotsky et al., 2012). Parents' involvement in their children's education has improved students' achievement (Rogers et al., 2009; Miedel & Reynolds, 1999) and may have resulted in lower levels of stress and higher levels of satisfaction.

Conclusion and Recommendations

This study explored the level of parents' satisfaction with the services provided to their children with LD in public elementary schools in Riyadh City. It was found that parents were satisfied with special education services. Thus, parents agreed that LD programs in their children's schools provided good services with regard to certain criteria. These criteria included identifying eligible students for special

education services, developing suitable IEP based on students' needs, providing appropriate instruction to improve their children's achievements, and providing useful collaboration. In addition, differences in parents' satisfaction was found for social status, academic level, and involvement in the child's school.

In light of these findings, a few recommendations can be proposed for practice and research. An important finding in the current study may be that satisfaction of parents of students with LD is enhanced when parents become involved in their children's schools. This finding may have an important implication for LD teachers and school personnel who should know that satisfaction is an important indicator of effective home-school partnerships. Therefore, they should develop partnership practices with parents of students with LD to ensure their involvement in appropriate procedures (Fantuzzo et al., 2009). Moreover, It is important that LD teachers inform parents about their rights, nature of the LD and possible solutions, and the importance of their involvement in their children's education.

In addition, The important dimensions of parents' satisfaction with LD and the reasons that contribute to higher levels of this satisfaction need to be addressed. This is worth further study because LDs represent the largest segment of student disabilities in Saudi Arabia.

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