PRINCIPALS' AND TEACHERS' PERCEPTIONS OF LEARNING DISABILITIES: A STUDY FROM NARA PREFECTURE, JAPAN

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Abstract. **In this study, perceptions of learning disabilities were obtained from 128 principals and 123 teachers in the Nara Prefecture, Japan. A factor analysis indicated that five factors underlie perceptions of learning disabilities: changes in the family and social situation, insufficient knowledge of and support for learning disabilities, teachers' abilities and professional development, teachers' situation and governmental issues. Teachers' situation was perceived to be the main factor, whereas the least important factor was governmental issues. Teachers mainly indicated agreement on the factor of insufficient knowledge of and support for students with learning disabilities. Principals were more aware of governmental issues than teachers.**

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The field of learning disabilities has developed dramatically in Japan in the last decade. The first definition of learning disabilities was developed in 1999 (Committee on Guidance/Education Planning for Children with Learning Disabilities, 1999). In 2000 and 2001, the Enrichment Project for the Support System for Students with Learning Disabilities was implemented. Since this project began, progress has been made in developing a screening system, frameworks for providing followup support for students with learning disabilities and improved networking between schools and specialists (Ministry of Education, Culture, Sports Science and Technology, 2002, 2003a).

Today a support system for students with learning disabilities is being developed (Ministry of Education, Culture, Sports Science and Technology, 2003b; Ueno, Muta, & Konuki, 2001; Yamaguchi, 2000). The development of a support system is part of a series of changes in education, the greatest reform being a change of name from "special education" to "special support education" and associated implications. This change reflects the addition of students who need support in the general education classroom, such as students who have learning disabilities, attention deficit hyperactivity disorder (ADHD) and those with high-functioning autism such as Asperger syndrome, to the group of students who are entitled to specialized assistance (Ministry of Education, Culture, Sports Science and Technology, 2003b).

Brief History of Support for Students with Learning Disabilities in Japan

"Special education" in Japan used to refer to students with significant low-incidence disabilities, who typically attended special schools or special classes, and who comprised approximately 1.3% of the total school population (Ministry of Education, Culture, Sports Science and Technology, 2003b). Now "special support education" also refers to students who are found in the general education classroom, and there is an emphasis on supporting the needs of these students. These students comprise about 6% of the total school population (Ministry of Education, Culture, Sports Science and Technology, 2003b). Consequently, special support education covers 7-8% of all students (Ministry of Education, Culture, Sports Science and Technology, 2003b).

In the past, there were as many students with significant disabilities in general education classes without special support as students in special schools or classes (Abe, 1998; Tsuge, 2001). There were several reasons for this situation: (a) the lack of differential identification between mild mental retardation and learning disabilities; (b) it was thought that general education was the appropriate placement for these students; and (c) parents' requests (Miyamoto, 2000). In terms of reasons (a) and (b), it is important to realize that Japanese teachers traditionally have believed that education should be provided for the "whole person," which included mental health, social and personality development, as well as cognitive improvement (Okano & Tsuchiya, 1999). Furthermore, elementary teachers believed that academic achievement is not as important as non-academic achievement (Okano & Tsuchiya, 1999) and, unlike U.S. teachers, Japanese teachers tended to assess students' effort rather than academic achievement such as IQ or talent (Singleton, 1989).

Learning disabilities were discussed in the medical and psychological literature for decades but not in education until the late 1980s. In 1990, the Liaison Conference of the National Association of Parents of Children with Learning Disabilities (later renamed National Parents' Association of Learning Disabilities) was established. The Advisory Committee on Tsukyu Class (resource rooms) and Related Issues (1992) raised the topic of learning disabilities for the first time in an education policy document. The majority (84%) of the resource rooms are for students with speech disorders, 9.5% are for students with emotional disturbance and 5.8% are for students with hearing impairment. Although students with mental retardation or learning disabilities were not supposed to attend resource rooms, some students with learning disabilities have received support in resource rooms for students with speech disorders. However, there are relatively few resource rooms in schools throughout Japan, so 66% of students who are eligible for services in resource rooms have to change schools to receive such services (Yamaguchi, 2000).

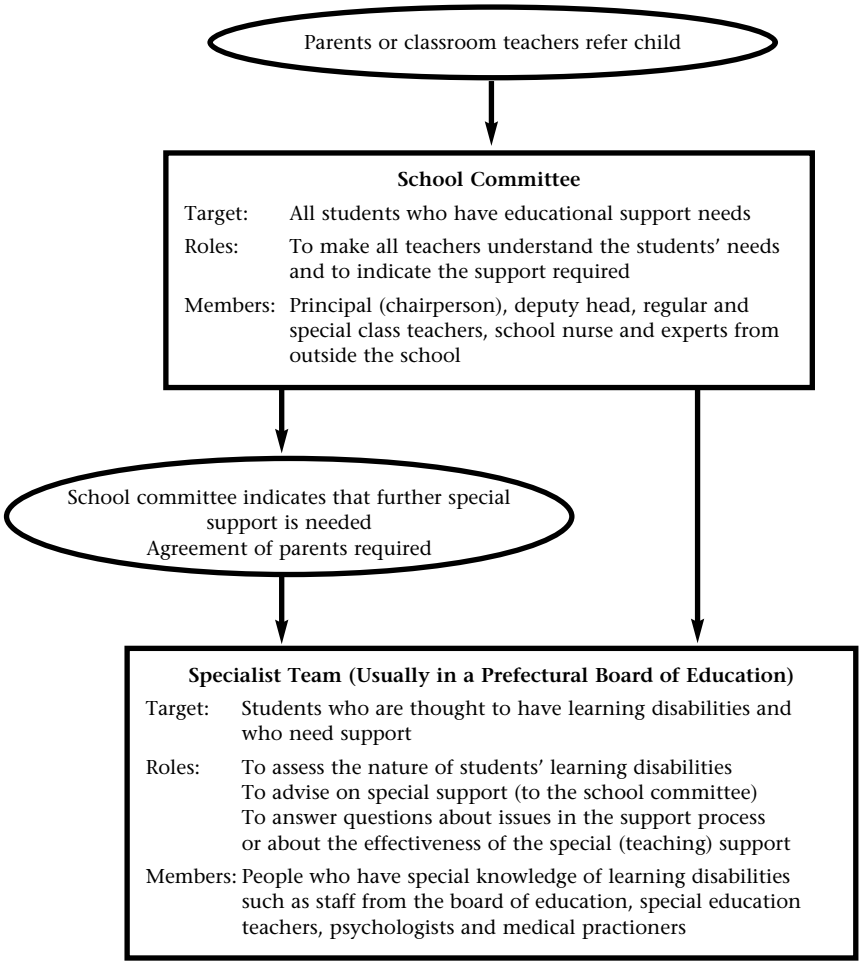
In addition to developing this support system, in recent years, the Ministry of Education and the Prefectural Boards of Education have provided professional development for principals and teachers (Ministry of Education, 1996, 1997). Generally, most educators have become familiar with the words "Gakushu shogai (learning disabilities)," "Gakushu konnan (learning difficulties)" and the Roman letters "LD," and with the characteristics of students with these challenges. However, teachers were confused about the concept of learning disabilities, which was not the same as difficulties in learning (Takayama, 1998). In 1999, the definition of learning disabilities was addressed in the final report written by the Committee on Guidance/ Education Planning for Children with Learning Disabilities (1999):

> Learning disabilities refers to varied conditions, fundamentally without mental retardation, manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, calculating or reasoning. Learning disabilities are presumed to be caused by central nervous system dysfunction rather than visual impairments, hearing impairments, intellectual handicap, emotional disturbance, or environmental influences being the direct cause. (Kataoka, 2001, p. 3)

Further, the nature of the support system was spelled out in guidelines in the final report, as reported by Ueno et al. (2001) (see Figure 1). First, teachers identify students with learning disabilities in their classrooms. Second, teachers discuss each student's situation in a staff meeting. Third, if the student needs further specialist assessment, a school committee arranges this with the parents' agreement. Fourth, the specialist team assesses the student and, if appropriate, recommends to the school committee that specialized support is needed. A specialist team is established in each prefecture, consisting of staff from the board of education in the municipality, special education teachers, psychologists and medical practitioners. This team not only assesses the students to identify learning disabilities, it also gives advice on educational support to a school committee.

In January 2004, the document "Guideline of Support System" was released (Ministry of Education, Culture, Sports Science and Technology, 2004). This practical document covered the identification system mentioned above and clarified the areas of accountability.

Figure 1. Procedure for identification of learning disabilities (translated and adapted by the first author from Ueno, Muta, & Konuki, 2001, p. 16).



Issues about Identification of Students with Learning Disabilities in General Education Classrooms

Since teachers have the task of identifying students' difficulties, their knowledge of learning disabilities and understanding of their students influence the provision of support. In one report, administrators from at least five cities stated that education and professional development for teachers was necessary because many teachers were unsure if their students had learning disabilities (Ministry of Education, Culture, Sports Science and Technology, 2002). It was argued that more knowledge and a deeper understanding of students' difficulties would help teachers provide more effective support in classrooms.

Noutomi (1998) discussed some of the reasons why students have difficulties at school. The first reason is the assessment system. Currently, absolute (criteria-based) assessment is used at the elementary school level. Noutomi pointed out that some parents are not aware of their children's delay in academic skills. When students go to secondary school, parents are told their children's rank in class and when it is perceived to be low, they become worried about their children's

academic skills. Such a situation might be caused by parents' lack of understanding of academic assessment and report cards or teachers not telling the parents about their child's academic difficulties in the early grades. Either way, the lack of awareness of children's problems means that assistance is delayed.

The second reason involves teachers' perceptions. When teachers encounter students who achieve poorly, they often feel that their lack of teaching skills is the reason why children are not doing well. In Japan, such teachers do not tell anyone about their difficulties with teaching but try to solve the children's achievement difficulties with their limited knowledge (Noutomi, 1998).

Using the same set of criteria, Haynes and colleagues (2000) compared the prevalence rate of students with learning disabilities between U.S. and Japanese teachers. The results showed that U.S. teachers identified 4.0% of their students whereas Japanese teachers identified 1.5%. They also compared teachers' evaluations of areas of deficits for students with learning disabilities. The significant difference between U.S and Japanese teachers was that U.S. teachers perceived students with learning disabilities as being weaker in listening, speaking, reading/writing and study skills, whereas Japanese teachers perceived their students as weaker in social skills. A study of teachers' perceptions of learning disabilities could provide knowledge that might lead to improved support of students with learning disabilities.

Other Research about Perceptions

In terms of research into teachers' perceptions of learning disabilities, Christensen and Elkins (1995) surveyed 597 principals, classroom teachers and resource specialists in 199 schools in Australia. They found three factors underlying educators' perceptions of the causes of low achievement: (a) academic (e.g., auditory or visual discrimination problems, information processing difficulties); (b) behavioral difficulties (e.g., behavior problems or antisocial behavior, poor attention or concentration in class); and (c) cultural and/or language background. Similarly, Westwood (1995) asked 311 teachers in the state of South Australia about the causes of students' difficulties in school learning. He found that factors within the student were mentioned by 62% of the sample, family background or culture by 14%, and factors within the curriculum by 8% of the sample.

The Project Team on Educational Support for Children Who Experience Learning Difficulties (hereafter Project Team) (2000) surveyed 28 principals and 97 teachers about their perceptions of teaching students with learning disabilities in the Kagawa Prefecture, Japan. According to the principals, the three most important needs were (a) parents' understanding and cooperation; (b) classroom management; and (c) teaching skills, teachers' professional development and team teaching. By comparison, the perceived needs as reported by the teachers were (a) parents' understanding and cooperation; and (b) a cooperative system in schools, teaching skills, classroom management and team teaching.

A comparison of the results from the Australian and Japanese studies reveals an interesting difference. Australian teachers believed that the causes of learning disabilities were related to students' characteristics. However, Japanese teachers thought parents' understanding and teachers' skills were more influential.

Furthermore, differences were found between the principals and teachers in Japan. While both groups acknowledged the lack of parents' understanding and lack of teaching skills, the principals thought that classroom management was more important, whereas teachers believed learning problems were caused by a lack of a cooperative support system among teachers in schools.

The aim of the present study was to add to the single Japanese study of perceptions by comparing principals' and teachers' perceptions of learning disabilities in the Nara Prefecture, Japan. This prefecture was selected because no prevalence survey of learning disabilities had been undertaken, nor had the support system been established. However, the Nara Parents' Association of Children/Individuals with LD was active in advocating for the introduction of a support system, and some teachers tried to offer support to students in their classrooms who they thought had learning disabilities. Thus, there was some activity at a grassroots level.

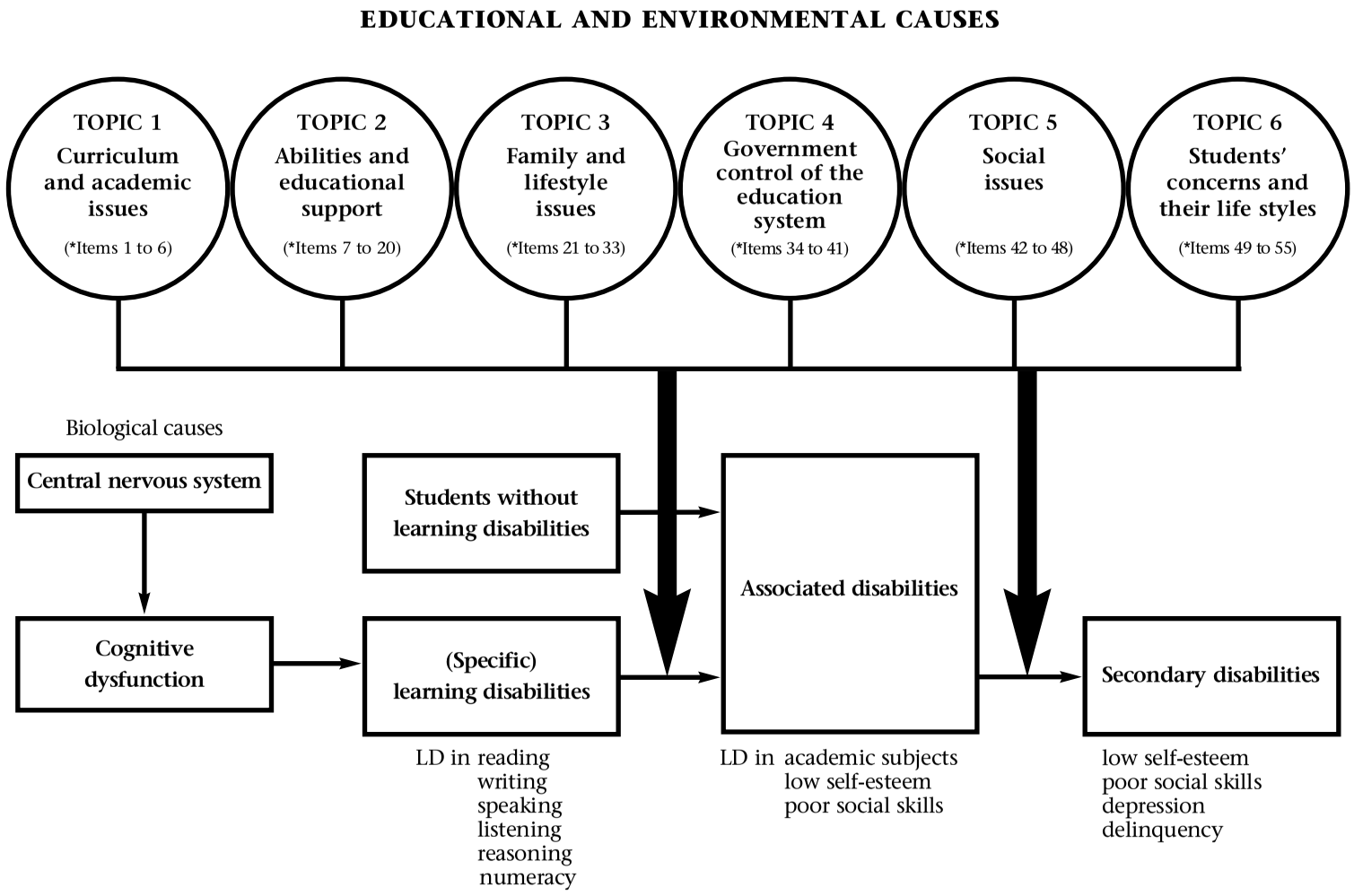
To describe the situation better, a model of the perceptions of causes of students' difficulties in learning was developed (Figure 2). This focused on educational and environmental causes that might bring associated difficulties. Although Japanese definitions of learning disabilities referred to factors within the individual, as mentioned before, research revealed that Japanese teachers often also considered social skills and teaching skills. As a reslt, this research also examined the model of perceptions of learning disabilities.

METHOD

Participants

One hundred and twenty-eight principals of public and private elementary schools and 123 teachers, the majority from elementary schools in the Nara Prefecture, participated. The samples represented 51% of principals and approximately 2% of elementary school teachers in the Nara Prefecture.

Figure 2. The hypothesized causes of learning difficulties used to develop items for the principals' survey.



*Items are from survey.

Instrument

Principals' and teachers' views of the causes of learning disabilities were assessed using 55/56 items, respectively, of a larger survey on the perceptions and support of students with learning disabilities in Japanese elementary schools (the full survey may be obtained from the first author). Judgments on each of the items related to the causes of learning disabilities were made on 4-point Likert-type rating scales (see Appendix).

All items were the same for the principals and the teachers except for one item added to the teacher survey: teachers feel restricted in teaching because school management does not understand (Item 18). The items were placed into the following six hypothesized causal topics: curriculum and academic issues (Items 1 to 6: T1); teachers' abilities and school support (Items 7 to 20/21: T2); family and lifestyle issues (Items 21/22 to 33/34: T3); government control of the education system (Items 34/35 to 41/42: T4); social issues (Items 42/43 to 48/49: T5); and students' concerns including their life styles (Items 49/50 to 55/56: T6). These hypothesized topics, derived from conversations with teachers and the research literature (Cave, 2001; Christensen & Elkins, 1995; Ogi, 2000; Project Team on Educational Support for Children Who Experience Learning Difficulties, 2000), reflect the six dimensions of the model (see Figure 2).

Procedure

Data were collected from the principals in December 2001 and from the teachers in February and August 2002. A letter of invitation and a survey questionnaire were sent by mail to the principals of every elementary school ($N = 251$) in the Nara Prefecture. Principals who elected to participate in the study returned the questionnaire by mail using a self-addressed stamped envelope. Before the return date (two weeks after receipt of the letter), reminder postcards were sent to each school to encourage the return of the survey. The responses were anonymous, but based on school size and the postmarks, it appears that the survey was collected from various sizes of schools from a wide area in the Nara Prefecture. Thus, it was judged to be a representative sample of principals in the Nara Prefecture.

For the teachers' survey, the method of data collection was planned to be the same. The first author approached a representative from the Prefectural Board of Education and also from the Principals' Association to obtain their permission to send the survey to all 251 elementary schools by mail. However, both groups were worried about increasing teachers' workload and therefore did not want to encourage teachers to cooperate in the study. Thus, other ways of data collection from teachers were substituted, such as using the personal connections of the first author.

Completed surveys were obtained from 123 teachers, who comprised 13 teachers from a single elementary school, 9 teachers contacted by a teacher friend of the first author and 101 teachers who attended a one-week certificate course in low-incidence disabilities and special education conducted by the Nara University of Education in August 2002. The 101 teachers indicated they taught in kindergarten ($n = 1$), elementary ($n = 69$) (including resource room teachers, special classroom teachers and school nurses), junior secondary ($n = 34$), secondary ($n = 5$) and special schools ($n = 13$). One teacher did not provide information about her teaching location.

The groups of 13 and 9 teachers were given the letter of invitation and survey in February 2002. A month later, the first author went to the elementary school in Nara city to the collect the 13 surveys. These teachers were also interviewed as part of a case study in a larger study by the first author. The teacher friend returned the completed questionnaires from her colleagues to the first author after one month. The remaining 101 teachers were given the letter of invitation and survey after beginning the certificate course, and the survey was collected at the end of the course by the first author in August 2002. It was unclear how representative a sample of teachers was obtained, other than by examining the demographic information provided by respondents.

The aim of this study was to identify teachers' perceptions of learning disabilities, no matter what support they received. From the results of questionnaires, it was evident that grade taught, years of teaching experience and class size varied. Female teachers made up 74% of all participants, a percentage that approximates official data (64% female).

The certificate course was a good opportunity to get a large number of surveys from a wide area in the Nara Prefecture. The course focused on low-incidence disabilities and covered education, psychology, medicine and teaching methods in special settings; thus, the area of learning disabilities was not covered. This was also evident from the responses to the question about experience in special education. Thus, the sample of teachers was judged to be roughly representative of the teacher workforce in the Nara Prefecture. It should be noted that the Nara Prefecture, which is located in the middle of the main island in Japan, has average population density and SES. Specifically, the proportions of low- and high-income families are below average. The main occupations are balanced between agricultural and industrial, with a substantial proportion of workers commuting to major cities like Osaka for jobs. Thus,

Table 1
Correlation Matrix of Factors

Factors	1	2	3	4
2	.258	–		
3	.365	.172	–	
4	- .045	- .145	.004	–
5	- .249	- .132	- .154	- .047

Note. Extraction method: Principal-axis factoring. Rotation method: Oblimin with Kaiser normalization.

the sample of educators was considered reasonably representative of those in the Nara Prefecture and Japan as a whole.

In order to identify the underlying constructs, responses from the participants were analyzed using a principal-axis factor analysis, with squared multiple correlations as the diagonal elements, Kaiser normalization and oblimin rotation. Mean substitution was used to deal with missing values. The scree plot of the eigenvalues was examined to determine the number of factors that could be retained for rotation.

RESULTS

The scree plot indicated that a five-factor solution was reasonable. The dimensions that emerged from the factor analysis were the groupings of the responses supplied by the principals. The dimensions are potentially meaningful representations of their views about the causes of learning disabilities. Five items (47, 40, 2, 1 and 5) had communalities less than .26 and did not fit in any factor. The correlations among the factors were relatively low (see Table 1).

As shown in Table 2, Factor 1 (Changes in the family and social situation) contained 25 items related to family situations, social issues, children's and parents' lifestyles and the attitudes of students themselves. Factor 2 (Insufficient knowledge of and support for LD) consisted of 8 items about the lack of awareness of issues related to learning disabilities by administrators and insufficient support. Factor 3 (Teachers' abilities and professional development) consisted of 9 items that indicated the limitations in teachers' teaching skills and the management skills of both principals and teachers, the lack of awareness of issues related to learning disabilities and the lack of appropriate training for teachers. Factor 4 (Teachers' situation) contained four items that reflected the participants' busy lifestyles and their stress. Factor 5 (Governmental issues) consisted of five items that concerned the education system, including curriculum guidelines and provision for screening and individual testing. The mean of Factor 5 was calculated by omitting Item 18 because this item was only asked in the teacher survey. The reliability and *t*-test on Factor 5 were also computed using four items.

The five factors were reviewed for their internal consistency using Cronbach's alpha. The alphas were .93 for Factor 1, .84 for Factor 2, .83 for Factor 3, .81 for Factor 4 and .52 for Factor 5. These alphas may be interpreted as falling in the moderate to excellent range.

While the five-factor solution is interpretable, a maximum-likelihood confirmatory factor analysis was used to determine if six factors corresponding to the hypothesized six topics were supported. However, χ^2 values were all significant, indicating that the data were not as well represented by the original six topics as by the five-factor solution.

The means for the principals and teachers combined on the five subscale scores indicated strongest agreement for items related to the teachers' situation (F4) and least agreement for items suggesting that governmental issues were important (F5) (see Table 2).

The item means are shown in Table 2. The highest three items (i.e., strongest causes) were Item 8 (M = 1.65, SD = .70), Item 9 (M = 1.70, SD = .76) and Item 20

Table 2

Five Factors of Principals' and Teachers' Perceptions of Causes of Learning Disabilities

FACTOR 1: CHANGES IN THE FAMILY AND SOCIAL SITUATION
SS1: *M* = 2.24, *SD* = .49

Mean (SD)	*N*	Items
2.17 (.84)	23	The number of nuclear families has increased.*
2.05 (.73)	25	Parents leave their children to do as they like.
2.01 (.82)	34	People have become materialistic (e.g., give money or things easily to their children).
1.99 (.80)	24	Parents pay too much attention to children or spoil them.
2.08 (.79)	55	Children play less and communicate less with children across ages.
1.92 (.85)	22	Students do not receive adequate family support.
1.97 (.83)	56	Children are busy attending JUKU or having extra lessons (e.g., piano, soccer) after school.
2.02 (.77)	54	Children's play has changed to TV games.
1.93 (.69)	32	Living habits have become irregular (e.g., sleeping hours).
2.25 (.79)	28	Parents focus on their own lives.
1.96 (.82)	30	Family situations have become complex (e.g., divorce/ remarriage).
1.98 (.76)	31	Regional support has worsened.
2.08 (.71)	33	Dietary habits have changed (e.g., menu or eating hours).
2.21 (.80)	27	Parents rely on specialists for childrearing guidance.
2.19 (.78)	49	People have weak connection with local area.
2.72 (.82)	48	The mass media clamour about LD/ADHD alarms people.
2.43 (.91)	6	The government curriculum guidelines for kindergarten were revised and started the free education curriculum.
2.80 (.79)	50	Students lack motivation.
2.40 (.73)	29	Parents do not trust teachers.
1.96 (.78)	53	Children have a lot of stress.
2.83 (.80)	52	Students do not study enough.
2.54 (.83)	51	Students do not know how to study.
2.19 (.77)	26	Parents do not have an awareness of such issues as LD.
2.70 (.81)	42	Schools do not have authority.
2.68 (.82)	46	Educational background influences employment.

FACTOR 2: INSUFFICIENT KNOWLEDGE OF AND SUPPORT FOR LD
SS2: *M* = 2.26, *SD* = .56

Mean (SD)	*N*	Items
2.23 (.83)	39	The municipality does not have an awareness of issues such as LD.
2.20 (.85)	38	The national government does not have an awareness of issues such as LD.
2.01 (.80)	37	There are insufficient numbers of specialists.
2.38 (.79)	36	There are insufficient resource rooms.
2.01 (.82)	35	There is no special class for LD/ADHD.
2.05 (.78)	43	The early detection and follow-up intervention system has not been fully developed.
3.02 (.68)	41	The Ministry of Education strictly controls each school.
1.88 (.91)	15	The number of students in a class is large.

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Table 2 continued
Five Factors of Principals' and Teachers' Perceptions of Causes of Learning Disabilities

FACTOR 3: TEACHERS' ABILITIES AND PROFESSIONAL DEVELOPMENT
SS3: *M* = 2.58, *SD* = .52

Mean (SD)	*N*	Items
2.44 (.77)	11	Teachers' creativity in education has worsened.
2.44 (.75)	21	Teachers' teaching skills have worsened.
2.78 (.85)	12	Teachers do not have an awareness of such issues as LD.
2.51 (.80)	16	Classroom teachers' leadership skills have worsened.
2.57 (.86)	7	Teachers are getting older and their desire to do new things is less strong.
2.18 (.84)	13	Teachers do not have appropriate training for such students.
2.79 (.73)	17	Principals' leadership skills have worsened.
2.60 (.79)	19	A system of cooperation in school has not been established.
2.96 (.78)	14	Teachers must teach all subjects. A classroom teacher takes all responsibility in his/her classroom.

FACTOR 4: TEACHERS' SITUATION
SS4: *M* = 1.74, *SD* = .60

Mean (SD)	*N*	Items
1.70 (.76)	9	Teachers are too busy.
1.85 (.77)	10	Teachers are under too much pressure.
1.65 (.70)	8	Teachers hardly make any time for individual students.
1.75 (.78)	20	There is a shortage in the number of teachers.

FACTOR 5: GOVERNMENTAL ISSUES
SS5: *M* = 2.67, *SD* = .49

Mean (SD)	*N*	Items
2.94 (.65)	3	The government curriculum guidelines are too difficult.
2.82 (.76)	4	The government curriculum guidelines do not regard basic academic skills as important.
2.47 (.84)	44	Medical techniques and early detection have improved and can detect more disabilities.
2.85 (.71)	18**	Teachers feel restricted in teaching because school management does not understand.
2.62 (.78)	45	Psychological tests have been developed and used on many occasions.

*The contrast to nuclear family is extended family, not single-parent family, which would be the common term in western countries.
**Only teachers were asked this item.
Note. Nos. 47, 40, 2, 1 and 5 did not fit in any factor.
A (Strongly agree) = 1, B = 2, C = 3, D (Do not agree at all) = 4.
The subscale on Factor 5 was calculated using four items (without Item 18).

(*M* = 1.75, *SD* = .78), all in Factor 4 (Teachers' situation). The lowest three items were Item 41 (*M* = 3.02, *SD* = .68) in Factor 2 (Insufficient knowledge of and support for LD), Item 14 (*M* = 2.96, *SD* = .78) in Factor 3 (Teachers' abilities and professional development) and Item 3 (*M* = 2.94, *SD* = .65) in Factor 5 (Governmental issues). Although these items reflected the least important aspects of learning disabilities, the means are nonetheless close to 3 (i.e., agree just a little) and therefore do not indicate that respondents thought them to

be unimportant. The means of the five items that did not fit in any factor were in the range of the highest three items or the lowest three items. Item 40 (M = 3.15, SD = .64) and Item 1 (M = 3.04, SD = .71) were the highest two items, while Item 2 (M = 1.68, SD = .74) was the second lowest of all items. The other items were Item 47 (M = 2.59, SD = .78) and Item 5 (M = 2.35, SD = .87). It is unclear if these items failed to load on any factor, other than having slightly lower item standard deviation.

T-tests for independent samples indicated that principals and teachers differed on Factors 1, 2 and 3. Principals placed greater importance on the insufficient knowledge and lack of support for learning disabilities (Factor 2), whereas teachers viewed changes in the family and social situation (Factor 1) and teachers' abilities and professional development (Factor 3) as more important (see Table 3). The results of Cohen's d' indicated a medium effect size for Factors 1 and 2, and a small effect size for Factors 3, 4 and 5 (see Table 3).

DISCUSSION

This study investigated principals' and teachers' perceptions of learning disabilities and related matters in the Nara Prefecture, Japan. Analyses of the responses to principals' and teachers' surveys revealed a five-factor solution not unlike the six hypothesized topics. Comparison of the topics (T) and factors (F) indicated that most items of the topic Government control of the education system (T4) matched Insufficient knowledge of and support for LD (F2), Family and lifestyle issues (T3). Social issues (T5) and Students' concerns (T6) were most aligned with Changes in the family and social situation (F1). Abilities and educational support (T2) split into Teachers' abilities and professional development (F3) and Teachers' situation (F4). Curriculum and academic issues (T1) and T5 were aligned with Governmental issues (F5). Overall, there was no significant conceptual difference between the hypothesized causal topics and the resulting factors.

The factor for which there was most support as a cause of learning disabilities was F4 (Teachers' situation). This suggests that teachers' situation such as being busy, being under pressure, and shortages in the number of teachers (i.e., leading to larger class size) was perceived to negatively influence student learning. Conversely, it could be said that if teachers had ample time for each student, students would not have learning disabilities or students with learning disabilities would not need special support. This finding was different from the results of Westwood (1995), who found that Australian teachers mentioned causes within students, but partly supported the research by Project Team (2000) showing that poor parent understanding was also important.

The factor for which there was least support was F5 (Governmental issues). Thus, the government's curriculum guidelines, development of psychological tests and improved early detection were thought to have little to do with the cause of learning disabilities. Japanese teachers have traditionally tended not to focus on IQ tests or academic achievements. However, Japanese criteria for identification of learning disabilities used a criterion of two years below grade level. This gap between teachers' views and the official criteria

Table 3
Summary of T-Tests and Cohen's d' for Independent Samples

Factor	Mean Principals	Mean Teachers	Pooled *SD*	*t* (246)	d'	Cohen's Standard
1	2.1343	2.3525	.4805	3.553**	- .4541	medium
2	2.3973	2.1234	.5434	3.960**	.5040	medium
3	2.5038	2.6693	.5106	2.552*	- .3241	small
4	1.8031	1.6694	.5951	1.769	.2247	small
5	2.7211	2.6116	.4851	1.769	- .2257	small

*p < .05, two-tailed. **p < .001, two-tailed.

would make it difficult for teachers to identify students with learning disabilities. Further, Japanese teachers think that they should be able to educate any student with sufficient effort.

The three items of F4 with the highest support were Item 8 (Teachers hardly make any time for individual students), Item 9 (Teachers are too busy) and Item 20 (There is a shortage in the number of teachers). Generally, classroom teachers in Japan work in their classrooms from 8:30 a.m. to 3:00 p.m. and often have meetings after school. In addition, the majority of teachers prepare lesson plans after these meetings and therefore seldom leave school before 6:00 p.m. Moreover, Japanese teachers have duties during recess and supervise lunch in the classrooms with their students. Okano and Tsuchiya (1999) reported the average teaching time was 26.5 hours per week (excluding non-academic activities). Thus, teachers find it difficult to find time to meet the needs of individual students, and their teaching lives are very busy. While it is true that Japanese teachers are busy, interestingly, they assessed their own working attitude more negatively than American teachers because the Japanese public have high expectations of teachers' work effort (Satoh, 1988). Furthermore, Japanese teachers tend to pay more attention to below-average students than American teachers, as reported by Okano and Tsuchiya (1999).

The least support was found for Item 41 (The Ministry of Education strictly controls each school) in F2, Item 14 (Teachers must teach all subjects. A classroom teacher takes all the responsibility in his/her classroom) in F3 and Item 3 (The government curriculum guidelines are too difficult) in F5. The results suggest that principals and teachers believe that government control of education did not contribute much to the presence of students with learning disabilities.

Item 2 (Special educational methods for LD have not been established yet) did not fit in any factor, but the mean of this item indicated that the item received the highest support. Teachers and principals appeared to be unaware of teaching methods appropriate for students with learning disabilities. Findings from other Japanese studies have suggested that once teachers have identified students with learning disabilities in their classrooms, they are at a loss about what to do. The methods teachers typically use to support these students include individual instruction, peer tutoring and extra homework (Ministry of Education, Culture, Sports Science and Technology, 2002; School Board of Gifu City, 2001). These methods are not based on current theories of learning and teaching or teachers' knowledge about learning disabilities, but on the teachers' experiences.

Item 1 (Evaluation standards [academic records] are unclear) did not fit in any factor. Noutomi (1998) suggested that one of the problems in identifying students with learning disabilities was the assessment system. She pointed out that the lack of assessment made it easy for parents to overlook their children's delays in academic skills and teachers tended not to tell parents how poorly their children were performing. In addition, cultural views that effort was more important than ability caused teachers' lack of interest in IQ and in discrepancy between achievement and potential.

However, more recently, evaluation has become an important issue. Thus, there have been discussions about changing the assessment system, with the Ministry of Education, Culture, Sports Science and Technology suggesting changing "evaluation in accordance with academic aims [absolute evaluation]" (Educational Curriculum Council, 2000).

The greatest difference between principals and teachers was found on F2 (Insufficient knowledge of and support for LD). Teachers indicated stronger agreement than principals that this was a cause of learning disabilities. In their rankings, principals focused more than the teachers on social issues, teachers' abilities and professional development. In contrast, teachers were concerned with the practicalities of how to teach students and how to support them. It makes sense that principals focused on broader issues, including the connection between school and community and encouragement of professional development for teachers. Teachers, however, focused on practical matters in the classroom, and especially wanted to know about efficient and effective teaching for students with learning disabilities.

Factor 1 (Changes in the family and social situation) did not seem to be associated with the principals' and teachers' perceptions of learning disabilities. This finding may be linked to the definition of learning disabilities used in Japan, which excludes environmental factors (e.g., familial or social aspects) as possible causes of students' difficulties (Committee on Guidance/Education Planning for Children with Learning Disabilities, 1999).

According to previous studies (Christensen & Elkins, 1995; Project Team, 2000), parents' understanding of learning disabilities and social indices are key factors in children's difficulties. It is interesting that Item 22 (Students do not receive adequate family support) was strongly supported in F1, and Item 24 (Parents pay too much attention to children or spoil them) also had strong support. These two items seem to contradict each other, but as Ogi (2000) mentioned, parents need to know when and how to support their children.

The principals and teachers may have perceived that parents of students with learning disabilities support their children in inappropriate ways. For example, the Life-Long Education Council (2000) has recommended that educational support at home should be improved and suggested that community-based support systems that provide information for parents and workshops on raising children should be provided. If these ideas are realized, parents' understanding of learning disabilities may be enhanced.

Links between schools, universities, specialists and others are also developing (Ministry of Education, Culture, Sports Science and Technology, 2002). For example, the Prefectural Boards of Education and some specialists teams have created manuals and guidebooks for teachers and parents to support students with learning disabilities. Also, school committees are being set up in many schools to discuss these students, visited and supported by itinerant specialists. The Guideline of Support System (Ministry of Education, Culture, Sports Science and Technology, 2004) is very practical and tells schools who, what and how to help students with learning disabilities.

Limitations

Teachers' results were collected from the whole Nara Prefecture, and represented various teaching grades and years of experience, as reflected in the answers in the questionnaire. However, as mentioned, the sampling plan was changed to avoid adding to teachers' workload. This led to a different procedure being used to collect data from that used for the principals. Consequently, the sample size for teachers was smaller than for principals.

Implications

The results of this study suggest that both principals and teachers need further information about learning disabilities. Principals were slightly more concerned about professional development than teachers. Seminars about learning disabilities are being offered by Prefectural Boards of Education and organizations such as the YMCA. However, they are often held on weekends, and teachers are not required to attend. Thus, principals might need not only to encourage teachers to undertake further learning but also support them by arranging for seminars during school time or immediately after school. The introduction of "pupil-free days" as in Australia, where 1-2 days are set aside each term for professional development within a school, may be a useful way of improving professional knowledge and skills. The creation of materials for teachers that include information about the nature of learning disabilities and effective teaching methods might also be beneficial.

Yamaguchi (2000) suggested that "open classrooms" should be provided for all students during recesses and after school. Such classrooms would be staffed by full- and/or part-time teachers or retired teachers knowledgeable about learning disabilities. Open classrooms would support students with and without learning disabilities in understanding their lessons better. This would mean that classroom teachers would not have to take extra time to assist students with learning disabilities.

The results also showed that Japanese teachers perceived that some causes of learning disabilities were within themselves. As mentioned, Japanese teachers traditionally implement a "whole person" philosophy of education. This means that they assume heavy responsibilities for all aspects of students' development as well as academic improvement for students with learning disabilities. However, as mentioned earlier, principals and teachers agree that teachers are already too busy, and that a heavier workload through helping students with learning disabilities might lead to burnout.

The creation of the position of coordinator has been suggested as a solution. The Ministry of Education, Culture, Sports Science and Technology proposed a "SNE Coordinator (tentative name)" in the final report in 2003, and it was also included in the Guideline of Support System in 2004. However, the Ministry did not provide a budget for employing SNE coordinators. Such coordinators are already used in the United Kingdom, and Australia similarly employs support teachers. SNE coordinators will assist classroom teachers in identifying students with learning disabilities and how to help them. They will also collaborate with specialists out of school and work with families. It is a new venture for Japanese teachers to share responsibility for students in their classroom with others, but it is worth trying.

CONCLUSION

The factor analysis conducted in this study indicated that both principals and teachers perceived that teachers' situations were a cause of learning disabilities. That is, teachers' busy lives and the pressures associated with teaching meant that students had greater difficulty with learning. Thus, limitations in the effectiveness of classroom teaching were seen as important causes of learning disabilities. This idea, while not unknown in the United States (see, for example, Cohen, 1971, who put forward dyspedagogia as an explanation as worthy of consideration as dyslexia), stands in contrast to the field's general explanation of learning disabilities as originating within the student. The principals perceived that family and social issues caused to students' learning disabilities. These issues included parents' tolerance of children's behavior and their inclination to spoil them.

The teachers in this study indicated that some students with learning disabilities did not receive appropriate support in school. The creation of more resource rooms or special classes for students with learning disabilities/ADHD have been suggested by Yamaguchi (2000) as possible means of providing support for these students. Further study of services for students with learning disabilities in Japan is required. The existing services will be explored as part of larger study by the first author, but whether these provisions are sufficient and consistent with best practice remains to be determined.

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APPENDIX: ENGLISH TRANSLATION OF PRINCIPALS' SURVEY SECTION C-Q6 AND TEACHERS' SURVEY SECTION C-Q4

What do you think are the causes of learning difficulties and behaviour problems? Please circle each one according to your own feeling.

	Strongly Agree	Agree	Just a Little Agree	Disagree
1. Evaluation standards (academic records) are unclear.	1	2	3	4
2. Special educational methods for LD have not been established yet.	1	2	3	4
3. The government curriculum guidelines are too difficult.	1	2	3	4
4. The government curriculum guidelines do not regard basic academic skills as important.	1	2	3	4
5. Academic skills are overemphasised.	1	2	3	4
6. The government curriculum guidelines for kindergarten were revised and started the free education curriculum.	1	2	3	4
7. Teachers are getting older and their desire to do new things is less strong.	1	2	3	4
8. Teachers hardly make any time for individual students.	1	2	3	4
9. Teachers are too busy.	1	2	3	4
10. Teachers are under too much pressure.	1	2	3	4
11. Teachers' creativity in education has worsened.	1	2	3	4
12. Teachers do not have an awareness of such issues as LD.	1	2	3	4
13. Teachers do not have appropriate training for such students.	1	2	3	4
14. Teachers must teach all subjects. A classroom teacher takes all responsibility in his/her classroom.	1	2	3	4
15. The number of students in a class is large.	1	2	3	4
16. Classroom teachers' leadership skills have worsened.	1	2	3	4
17. Principals' leadership skills have worsened.	1	2	3	4
18. Teachers feel restricted in teaching because school management does not understand.*	1	2	3	4
19. A system of cooperation in a school has not been established.	1	2	3	4
20. There is a shortage in the number of teachers.	1	2	3	4
21. Teachers' teaching skills have worsened.	1	2	3	4
22. Students do not receive adequate family support.	1	2	3	4
23. The number of nuclear families has increased.	1	2	3	4
24. Parents pay too much attention to children or spoil them.	1	2	3	4
25. Parents leave their children to do as they like.	1	2	3	4
26. Parents do not have an awareness of such issues as LD.	1	2	3	4
27. Parents rely on specialists for child rearing guidance.	1	2	3	4
28. Parents focus on their own lives.	1	2	3	4
29. Parents do not trust teachers.	1	2	3	4
30. Family situations have become more complex (e.g., divorce/remarriage).	1	2	3	4

31. Regional support has worsened.	1	2	3	4
32. Living habits have become irregular (e.g., sleeping hours).	1	2	3	4
33. Dietary habits have changed (e.g., menu or eating hours).	1	2	3	4
34. People have become materialistic (e.g., give money or things easily to their children).	1	2	3	4
35. There are no special classes for LD/ADHD.	1	2	3	4
36. There are insufficient resource rooms.	1	2	3	4
37. There are insufficient numbers of specialists.	1	2	3	4
38. The national government does not have an awareness of issues such as LD.	1	2	3	4
39. The municipality does not have an awareness of issues such as LD.	1	2	3	4
40. The school district system causes LD.	1	2	3	4
41. The Ministry of Education strictly controls each school.	1	2	3	4
42. Schools do not have authority.	1	2	3	4
43. The early detection and follow-up intervention system has not been fully developed.	1	2	3	4
44. Medical techniques and early detection have improved and can detect more disabilities.	1	2	3	4
45. Psychological tests have been developed and are used on many occasions.	1	2	3	4
46. Educational background influences employment.	1	2	3	4
47. Environmental hormones and environmental pollution cause LD.	1	2	3	4
48. The mass media clamour about LD/ADHD alarms people.	1	2	3	4
49. People have a weak connection with their local area.	1	2	3	4
50. Students lack motivation.	1	2	3	4
51. Students do not know how to study.	1	2	3	4
52. Students do not study enough.	1	2	3	4
53. Children have a lot of stress.	1	2	3	4
54. Children's play has changed to TV games.	1	2	3	4
55. Children play less and communicate less with children across ages.	1	2	3	4
56. Children are attending JUKU or having extra lessons (piano, soccer, etc.) after school.	1	2	3	4

*Only teachers were asked Item 18.