Chyrse Hatzichristou, Diether Hopf

Students with learning disabilities : academic and psychosocial aspects of adaptation

first published in:
School Psychology International, 14 (1993) 1, p. 43-56, ISSN 0143-0343,
DOI 10.1177/0143034393141003

Students with Learning Disabilities

Academic and Psychosocial Aspects of Adaptation

CHRYSE HATZICHRISTOU and DIETHER HOPF
Max Planck Institute for Human Development and Education, Berlin, Germany

ABSTRACT This study explores learning-disabled students' academic and psychosocial adjustment as compared to their non-disabled classmates within the mainstream public education system in Greece. A brief description of the special education services in Greece is also presented. The sample of the study consisted of fifth and sixth grade elementary school students in northern Greece. The learning-disabled students were identified based on teachers' evaluation (N=30). The control group consisted of all classmates of these students (N=307). Teacher-, peer- and self-ratings were used and achievement data were obtained. The learning-disabled students were found to exhibit various academic and psychosocial difficulties based on the perceptions of all raters. Implications of the findings are discussed.

Introduction

There has been a lack of consensus in the field about the definition of learning disabilities and the criteria used to identify learning-disabled students (Shepard et al., 1983). The term 'learning disability' usually includes disorders associated with poor school achievement which cannot be attributed to sensory handicaps, mental retardation, emotional disturbance or environmental disadvantage (National Advisory Committee on Handicapped Children, 1967).

Referral and diagnosis of learning disabilities were mainly based on academic retardation of children with normal intelligence (Bryan and Bryan, 1975). Specific discrepancies between ability and performance are used as the primary criterion for learning-disability eligibility and

Address correspondence to: Dr Chryse Hatzichristou, Max Planck Institute for Human Development and Education, Lentzeallee 94, 1000 Berlin 33, Germany.

School Psychology International (SAGE, London, Newbury Park and New Delhi), Vol. 14 (1993), 43–56.

special education placement from most state departments of education in the USA (Mercer et al., 1985). Several problems and limitations of the identification criteria and the methods of calculating a discrepancy between ability and achievement have been noted (Braden and Algina, 1989; Clarizio and Phillips, 1989; Shepard et al., 1983).

Various studies have examined the educational, social and psychological aspects of learning-disabled (LD) children's functioning in school. Studies of teachers' perceptions of LD children's behaviour have shown that teachers perceive LD children as experiencing more adjustment problems as compared to their non-LD (NLD) peers. Teachers perceive LD children as having more conduct and interpersonal behaviour problems, and as being hyperactive, less cooperative, less task oriented, more distractible, more introverted, less accepting of responsibility and less creative than their classmates (Bryan and McGrady, 1972; Gresham and Reschly, 1986; Keogh et al., 1974; McCarthy and Paraskevopoulos, 1969; McKinney et al., 1982).

Sociometric measures indicate that learning-disabled students are usually less accepted and more rejected by their peers (Bruininks, 1978; Bryan, 1974, 1976; Landau et al., 1984; Scranton and Ryckman, 1979; Siperstein et al., 1978). However, Horowitz (1981) has found that LD children do not differ significantly from their NLD peers with respect to popularity when intelligence is controlled for. Similarly, Prillaman (1981) failed to find that LD children are less popular than their classmates, while finding that the LD children are over-represented in the sociometric isolate category when compared to their non-disabled peers. Even though the findings of several studies suggest that LD children's sociometric status differs from that of their peers, they do not provide us with unequivocal conclusions due to several shortcomings (Hatzichristou and Whang, 1987).

The comparison of LD and NLD children's self-concept has yielded inconsistent results. Some studies found a difference in general self-concept favouring NLD children (Bruininks, 1978; Jones, 1985) while other studies failed to find any significant difference between the groups (Boersma et al., 1979; Winne et al., 1982). Findings were, however, consistent when subscale scores — mainly academic/school ability subscales — of self-concept measures were compared (Chapman, 1988). LD children were found to have a lower self-concept than their NLD peers (Jones, 1985; Winne et al., 1982).

The purpose of the study presented here was to examine the school adjustment of children with learning disabilities as compared to their non-disabled classmates within the mainstream public education system in Greece, using a multi-perspective approach. This approach takes the perceptions of teachers, peers and self into consideration and provides a more valid and reliable picture of children's difficulties in

school (Hatzichristou, 1987). An effort was made to explore the performance of LD students across a variety of domains in comparison to their peers and to draw a more comprehensive definitional profile of LD children. Since the current decade is regarded as essential for the evolution of special education services in the Greek school system, data from such studies provide the necessary basis for the development of this sector of the school system. The following brief description of the special education services in Greece is important for understanding the specific parameters of the educational system.

Special education in the Greek educational system

In the past, disabled children in Greece have been segregated from the mainstream educational system, mainly attending special private schools. Since the 1970s, the Ministry of National Education and Religion has shown a growing interest in special education services. Special public schools have been founded and training for primary school teachers in special education has been made available.

Only a decade ago was the first law about special education (1143/1981 — 'Special Education, Special Vocational Training, Employment and Social Welfare of Persons Deviating from the Normal') passed in Greece. In 1985, 'Special Education' was included as a specific chapter of a new law (1566/1985) about the 'Structure and Functioning of Primary and Secondary Education'. The law (Article 32, § 2) includes various categories of individuals with special needs, that is, physically-handicapped, mentally-handicapped, learning-disabled (dyslexia, language disorder, and so on). Statements also refer to various settings where special education is provided (special schools, special resource classes within the regular schools, etc.) (Article 32, § 4), to assessment and classification procedures for children with special needs (Article 33) and to the need for specialized staff (psychologists, speech therapists, social workers, etc.) (Article 35).

Table 1 presents data on the number of special schools, special classes, students and teachers and Table 2 presents data on the number of primary and secondary school students based on type of disability.

The first seven special education classes for learning-disabled students were formed in public elementary schools during the 1983–4 school year and the students attended these classes for three to six hours per week. Since then, the number of classes has reached a total of 285. These are located mainly in the big cities. The establishment of special education classes developed mainly after the circular of the Ministry of National Education and Religion (R6/1–10–1984) regarding the 'Development of Special Classes'. Still only a very small percentage

Table 1 *Number of special education schools, special education classes in regular schools, students and teachers during 1979–89*

School Year	*Special Schools*	*Special Classes*[a]	*Students*	*Teachers*
1978–79	67	–	1997	163
1979–80	75	–	2092	184
1980–81	84	–	2360	212
1981–82	87	–	2536	213
1982–83	122	–	2725	332
1983–84	139	7	3241	359
1984–85	142	25	3484	471
1985–86	152	105	4989	619
1986–87	150	141	5330	641
1987–88	160	221	6929	777
1988–89	164[b]	285	8200	850

Source: Ministry of National Education and Religion, Division of Special Education, Information Booklet for Special Education (1988: 14).
[a] Special classes exist only in elementary schools.
[b] Out of these 164 special schools, 27 are kindergartens, 123 are elementary schools, 7 are junior high schools ('Gymnasio'), 4 are high schools ('Lykio') and 3 are special vocational schools.

Table 2 *Number of primary and secondary school students by type of disability (school year 1987–88)*

Type of disability	*Number of students*		*Total*
	Primary schools	*Secondary schools*	
Blind	106	–	106
Deaf (totally or partly)	476	231	707
Physically handicapped	266	133	399
Mentally handicapped	2100	135	2235
Delinquents	81	49	130
Learning disabled (in special classes in regular schools)	3352	–	3352
Total	6381	548	6929

Source: Ministry of National Education and Religion, Division of Special Education, Information Booklet for Special Education (1988: 19).

of elementary school students with learning disabilities get special help (about 0.38 percent of elementary school pupils).

According to law, assessment for placement in special education schools and special classes is done at 'medicoeducational' centres by multidisciplinary teams of professionals and by 'mobile diagnostic

teams' in various areas. Regarding the recently established special classes in regular elementary schools, only a small percentage of learning-disabled students is placed in these classes after the assessment and recommendation of the previously mentioned professional teams. A research study on the special education classes in regular elementary schools conducted by the Special Education Division of the Ministry of National Education and the Greek Association of Mental Health and Neuropsychiatry of Children (Nikodimos and Papatheophilou, 1990) showed that only 8 percent of the children attending these classes were placed there after the assessment and recommendation of professionals, 64 percent after the recommendation of teachers, 23 percent after the recommendation of a teacher in cooperation with school consultants and 5 percent after parents' initiative. Approximately 71 percent of the children had difficulties in reading, writing, spelling and/or math. The majority of children who usually come from more than one school in the same area, attended these classes for three to ten hours per week. Only half of the teachers had specific training in special education. These teachers mentioned several problems in their work regarding assessment and diagnosis procedures of LD children, lack of teaching material, lack of specialized training in working with these children, and lack of satisfactory cooperation between the teachers, the parents and the 'medicoeducational' teams.

Method

Sample

The sample in the study consisted of fifth and sixth grade elementary school pupils (N=337), 10 to 12 years of age (M=11.2, SD=0.66), attending fourteen classes in regular public schools in northern Greece (Macedonia). Teachers were asked to identify children with severe learning difficulties which were not due to mental retardation or to major sensory, physical, emotional or environmental factors. The final selection of the children was made in cooperation and consultation with the experimenter, who is a school psychologist. After examining all cases, thirty children (8.9 percent, 18 boys and 12 girls) were identified as 'learning disabled', mainly having severe difficulties in reading, writing and spelling. Out of these students, only five were attending special education classes, because resource classes did not exist in the other schools. The control group consisted of all classmates (N=307) of these students attending the same classes. Participation of teachers and pupils was voluntary. All teachers and students asked to participate agreed.

Instruments and procedures
This study constitutes part of a larger research project in the Greek schools (Hatzichristou and Hopf, 1991, 1992a, 1992b, 1993). Teacher, peer and self-rating instruments were used and achievement data were obtained. The instruments were translated into Greek for the purpose of this project and they were analysed for their psychometric features, taking into consideration the distribution of single items and combined scores. The classical factor solution method followed by varimax rotation was used for the factor analysis of the instruments and indices and scales to be used for group comparisons were determined. Reliabilities of the scales were computed using Cronbach's alpha coefficient.

Teacher rating. For each student in every class, teachers were asked to fill out a revised and translated version of the Pupil Behavior Rating Scale (PBRS, Lambert and Bower, 1962), which consists of 11 attributes (school-related behaviour; 5-point Likert-type scale). The factor analysis of the teacher rating yielded three factors which are similar to those found in American research and which accounted for 75.4 percent of the variance (Hatzichristou and Hopf, 1991). Factor 1 was called Classroom Adaptation (a=.91) (items relevant to successful learning), Factor 2 was called Interpersonal Behavior (a=.79) (interpersonal and social skills) and Factor 3 was called Intrapersonal Behavior (a=.71) (intrapersonal and psychological items).

Achievement. Teachers were asked to evaluate the general school performance of each student (4-point scale). Achievement data (grades: A, B, C) on language, mathematics and history were also obtained from the students' files at the end of the school year.

Peer nominations. Students in each classroom were asked to fill out a questionnaire consisting of two sociometric questions (best friends/not friends) and seven behavioural questions. They were asked to list three classmates whom they 'like the most' (LM) and three whom they 'like the least' (LL). The total number of LM and LL first-choice peer nominations received by each pupil were tallied and standardized within each classroom. Based on the criteria described by French and Waas (1985), the children were further classified into five sociometric status groups (popular, rejected, neglected, controversial and average). The students were also asked to name two classmates who best fit each of seven behavioural descriptions based on peer perceptual correlates of sociometric status and behavioural profiles (Coie et al., 1982). The factor analysis of the behavioural questions yielded three factors which explained 66.6 percent of the variance (Hatzichristou and Hopf, 1992a). Factor 1 was labelled Popular/Prosocial Behaviour (a=.66), Factor 2

was labelled Aggressive/Negative Behaviour (a=.67) and Factor 3 was labelled Intrapersonal Behaviour Difficulties.

Self-rating. The students also completed a translated version of the Self-Description Questionnaire (SDQ), which is a multifaceted measure of self-concept (5-point, Likert-type scale) (Marsh et al., 1983).[1] The factor analysis yielded eight factors which explained 46.8 percent of the variance (Hatzichristou and Hopf, 1993). The eight factors were labelled as follows: F1: Mathematics (a=.91); F2: Physical Appearance — Self-Concept (a=.88); F3: Interest in Learning and School Subjects (a=.87); F4: Physical Abilities/Sports (a=.81); F5: School Performance — Self-concept (a=.78); F6: Learning Ability (a=.80); F7: Relationships with Parents (a=.64); F8: Relationships with Peers (a=.70).

Results

Statistically significant differences between the LD and control groups (t-tests) were found regarding all items of the teacher rating (quarrels more often, difficulty in following directions, immature, isolated, easily distracted, dangerous behaviour, doesn't like school, difficulty in learning, unhappy, not obedient) except item 9: sick or stays home when faced with a difficult problem (Table 3). Students with LD had significantly more difficulties than control students from the teachers' perspective. Comparison of the factor scores of the groups further showed that LD students have significantly more Classroom Adaptation (Factor 1) and Interpersonal Behaviour (Factor 2) problems. Within the LD group, boys were rated as having more interpersonal behaviour problems (quarrel more often, immature/inappropriate responses, dangerous behaviour) than girls (Table 3).

The group-by-gender interactions for the teacher rating items and factors were also tested. Significant interactions were found for the Interpersonal Behaviour factor (F=10.72, p<.001) and for the following items: 'immature responses at school' (F=9.80, p<.002), 'dangerous behaviour' (F=13.005, p<.001) and 'not obedient' (F=4.32, p<.038). The analysis according to group and gender showed that teachers perceived LD students as having more interpersonal problems than NLD students and boys more interpersonal problems than girls. The interaction only reflected differences in the magnitude of effects. Teachers perceived LD boys as experiencing the strongest interpersonal behavioural difficulties.

The group-by-grade interaction was found to be significant for the 'shy/isolated' teacher rating item (F=26.30, p<.001) (and the Intrapersonal Behaviour factor F=10.92, p<.001). The main effects of group and grade showed that LD students were more shy and isolated at

Table 3 *Means of teacher rating items*

Teacher rating items	*Students*			*Learning-disabled students*		
	Learning-disabled	*Control*	*t*	*Males*	*Females*	*t*
1. Quarrels with others more often	3.37	4.11	– 3.80**	2.89	4.08	–2.80**
2. Difficulty in following directions	1.90	3.93	– 9.81**	1.67	2.25	n.s.
3. Immature/ inappropriate responses	3.20	4.57	– 5.58**	2.72	3.92	–2.66**
4. Shy/isolated	3.80	4.59	– 3.63**	3.83	3.75	n.s.
5. Easily distracted	2.33	3.97	– 7.95**	2.17	2.58	n.s.
6. Dangerous behaviour	3.93	4.72	– 4.09**	3.44	4.67	–3.78**
7. Doesn't like school/ no enthusiasm	2.48	4.34	– 9.35**	2.31	2.75	n.s.
8. Difficulty in learning	1.70	4.11	–11.37**	1.72	1.67	n.s.
9. Sick or stays home when problems	4.43	4.62	n.s.	4.39	4.50	n.s.
10. Unhappy/ depressed	4.07	4.65	– 2.85**	4.22	3.83	n.s.
11. Not obedient	4.02	4.76	– 3.14**	3.76	4.42	n.s.
*F*1 Classroom Adaptation	–1.61	0.03	– 9.22**	–1.61	–1.60	n.s.
*F*2 Interpersonal Behaviour	–0.66	0.11	– 2.46*	–1.37	0.40	–3.24**
*F*3 Intrapersonal Behaviour	–0.35	0.08	n.s.	–0.16	–0.64	n.s.

Scale: 1=always, to 5 = never (no problem). * $p<.05$; ** $p<.01$.

school than NLD students and sixth graders were more isolated than fifth graders. The interaction revealed that while NLD students exhibit similar patterns of intrapersonal behaviour at grades five and six, LD students become more shy and isolated at grade six.

As expected, LD students were also found to have lower school performance and lower achievement in language, history and math in comparison to control students (Table 4).

Regarding the peer nomination questionnaire, LD students received significantly fewer 'like most' and significantly more 'like least' nominations than control students (Table 5). They further received significantly fewer nominations regarding prosocial behaviour items (leader in school, liked/helps everybody, behaves in a proper way to gain the teacher's approval) and scored lower in the Popular/Prosocial Behaviour factor. No significant differences between the groups were found

Table 4 *Means of general school performance and achievement*

Achievement variables	*Learning-disabled students*	*Control students*	*t*
General school performance[a]	1.17	2.92	–18.55**
Language achievement[b]	2.87	1.62	5.17**
History achievement	2.62	1.57	4.38**
Math achievement	2.75	1.70	4.04**

[a]*Scale*: 1=poor, to 4=excellent; [b]Grades: 1=A, 2=B, 3=C; ** $p<.01$.

Table 5 *Means of peer nominations*

Peer rating items	*Learning-disabled students*	*Control students*	*t*
Best friends	0.57	0.99	–2.19*
Not friends	1.80	0.86	3.77**
1. Leader in school	0.03	0.99	–6.78**
2. Quarrels often with other students	1.67	0.90	n.s.
3. Shy and sensitive	1.10	0.90	n.s.
4. Liked by everybody and helps everybody	0.10	0.94	–7.15**
5. Snobbish and arrogant	1.03	0.88	n.s.
6. Tries to behave in a proper way to gain the teacher's approval	0.37	0.87	–2.61*
7. Quarrels often with the teacher	1.47	0.69	n.s.
*F*1 Popular-Prosocial Behaviour	–0.48	0.02	–6.40**
*F*2 Aggressive-Negative Behaviour	0.33	–0.06	n.s.
*F*3 Intrapersonal Behaviour Difficulties	0.10	–0.03	n.s.

* $p<.05$; ** $p<.01$.

for the Aggressive Behaviour and Intrapersonal Behaviour Difficulties factors. The group-by-gender interactions for the peer-rating items and factors were not significant. Concerning sociometric group classification, five Chi-square tests were performed to examine whether LD and control students were differentially selected to the five status groups. Only one Chi-square test was significant: LD students were more likely to be selected to the rejected group than their NLD classmates ($x^2=17.64$, $p=<.001$).

A significant difference between the groups was found regarding only one of the eight factors of the self-rating, 'School Performance — Self-Concept' (t=4.13, p<.001). The LD students perceived themselves as having low school performance connected with a negative self-concept and parental disappointment as compared to their non-disabled peers. No significant group-by-gender interactions for the self-rating factors were found.

Discussion

Learning-disabled students were found to experience various academic and psychosocial difficulties. Similar to the findings of relevant studies in the literature (Gresham and Reschley, 1986; McCarthy and Paraskevopoulos, 1969; McKinney et al., 1982), teachers perceived these students as having problems in all assessed aspects of their behaviour and achievement in school. It is important that teachers evaluated LD students — both boys and girls — as having deficits in comparison to their non-disabled classmates, not only in academic task-related behaviour (i.e. difficulty in following directions, easily distracted), but also in interpersonal skills (i.e. quarrels often, etc.) and in intrapersonal-psychological aspects of behaviour (i.e. isolated, unhappy/depressed). They further perceived LD boys as having the severest social behaviour problems. In the teachers' opinion, LD students become more shy and isolated as they grow older and progress from the fifth to the sixth grade.

Learning-disabled students received fewer positive peer nominations and more negative peer nominations than their non-disabled classmates, in agreement with other studies (Bryan, 1974, 1976; Siperstein et al., 1978). They were also more likely than their non-handicapped peers to be put in the rejected sociometric status group. No differences in positive and negative nominations were found between LD boys and girls, contrary to some other studies showing that LD girls were less likely to be accepted and more likely to be rejected than learning-disabled boys (Bryan, 1974; Scranton and Ryckman, 1979).

Regarding behavioural patterns, LD students were perceived by their peers as exhibiting prosocial behaviour less frequently. On the other hand, peers did not report them as more often exhibiting antisocial and intrapersonal behaviour problems, contrary to the teachers' perceptions. Thus, even though LD students are less accepted and more rejected by their peers, they are not perceived as being more aggressive and/or more isolated. LD students may exhibit other subtle behavioural patterns, which are not assessed by the instrument of this study and may account for the higher frequency of negative peer

nominations. It is also important for further research with a bigger sample size to address the issue of classification of LD students into different behavioural subgroups (Hatzichristou and Whang, 1987).

Based on self-perceptions, LD children reported greater academic difficulties and lower school performance which is further connected with a more negative self-concept and parental disappointment than their non-disabled classmates. Other studies have also reported lower self-concept of LD students in academic subscales of self-rating (Jones, 1985; Winne et al., 1982). It is surprising, though, that no differences between the groups were found regarding the Learning Ability and the Interest in Learning and School Subjects self-rating factors. It seems rather probable that, even though the children acknowledge their actual poor performance at school (which is connected with low self-esteem), they prefer not to report having lower learning ability or they just 'deny' it through a defence mechanism. LD students did not report having more problems in their peer relationships, which is contradictory to the previously mentioned finding that they are less accepted and more rejected by their peers. Again, it seems that they either prefer not to acknowledge any difficulties or they deny having any. We believe that further research on different subgroups of LD students may shed some light on various differences in the children's self-perceptions.

Similar to findings in other countries, students with learning disabilities were found to experience problems in various domains of their behaviour in mainstream regular schools, based on teacher-, peer- and self-perceptions. They have to struggle in a school system where language competence is strongly related to academic success (Hatzichristou and Hopf, 1992b), and academic success is further connected to their self-image and to parental and societal expectations (Hatzichristou and Hopf, 1993). In addition to the general reluctance of Greek parents to acknowledge their children's disorders and disabilities and seek professional help (Bouhoutsos and Roe, 1984), we believe that parents' and educators' lack of information about the nature, aetiology and diagnosis of learning disabilities contributes to the children's problems. The establishment of special resource classes in the regular public schools has been the first major step in terms of acknowledgement and awareness of the existence of learning disabilities and providing help for these students without segregating them. Continued efforts should focus not only on the various aspects related to the development of these special classes (identification procedures, specific training of the teachers, material, etc.), but also on informing parents, educators and the general public about the existence and nature of the children's problems.

Note

1. The instrument used in this research differs from its current English version in several ways. Comparisons with research based on the current English version of the instrument should be interpreted cautiously.

References

Boersma, F.J., Chapman, J.W. and Maguire, T.O. (1979) 'The Student's Perception of Ability Scale: An Instrument for Measuring Academic Self-concept in Elementary School Children', *Educational and Psychological Measurement* 39: 1035–41.

Bouhoutsos, J.C. and Roe, K. (1984) 'Mental Health Services and the Emerging Role of Psychology in Greece', *American Psychologist* 39: 57–61.

Braden, J.P. and Algina, J. (1989) 'A Method for Determining the Probability of Special Education Eligibility', *Journal of School Psychology* 27: 5–13.

Bruininks, V.L. (1978) 'Actual and Perceived Peer Status of Learning Disabled Students in Mainstream Programs', *Journal of Special Education* 12: 51–8.

Bryan, T. (1974) 'Peer Popularity of Learning Disabled Children', *Journal of Learning Disabilities* 7: 261–8.

Bryan, T. (1976) 'Peer Popularity of Learning Disabled Children: A Replication', *Journal of Learning Disabilities* 9: 26–34.

Bryan, T. and McGrady, H. (1972) 'Use of a Teacher Rating Scale', *Journal of Learning Disabilities* 5: 199–206.

Bryan, T. and Bryan, J. (1975) *Understanding Learning Disabilities*. Port Washington, NY: Alfred.

Chapman, J.W. (1988) 'Learning Disabled Children's Self-concepts', *Review of Educational Research* 58: 347–71.

Clarizio, H.F. and Phillips, S.E. (1989) 'Defining Severe Discrepancy in the Diagnosis of Learning Disabilities: A Comparison of Methods', *Journal of School Psychology* 27: 383–91.

Coie, J.D., Dodge, K.A. and Coppotelli, H. (1982) 'Dimensions and Types of Social Status: A Cross-age Perspective', *Developmental Psychology* 18: 557–70.

French, D.C. and Waas, G.A. (1985) 'Behavior Problems of Peer-neglected and Peer-rejected Elementary-age Children: Parent and Teacher Perspectives', *Child Development* 56: 246–52.

Gresham, F.M. and Reschley, D.J. (1986) 'Social Skills Deficits and Low Peer Acceptance of Mainstreamed Learning Disabled Children', *Learning Disability Quarterly* 9: 23–32.

Hatzichristou, C. (1987) 'Classification and Differentiation of Socially Isolated Children', PhD dissertation, University of California, Berkeley.

Hatzichristou, C. and Hopf, D. (1991) 'Behavior Problems and School Performance of Primary and Secondary School Students Based on Teachers' Evaluation', *Educational Review* (Paedagogiki Epitheorisi, in Greek), 14–15: 107–43.

Hatzichristou, C. and Hopf, D. (1992a) 'Behavior Patterns of Elementary and Secondary School Students Based on Peer Evaluation', *Educational Review* (Paedagogiki Epitheorisi, in Greek) 16: 141–64.

Hatzichristou, C. and Hopf, D. (1992b) 'School Performance and Adjustment of the Greek Remigrant Students in the Schools of Their Home Country', *Applied Psycholinguistics* 13(3): 279–94.

Hatzichristou, C. and Hopf, D. (1993) 'Self Perceptions of Elementary and Secondary School Students', *Educational Review* (Paedagogiki Epitheorisi, in Greek) (in press).
Hatzichristou, C. and Whang, P. (1987) 'Social Interventions in the Learning Disabled: Past, Present and Future', US Department of Education, Office of Educational Research and Improvement (DERI), ERIC Documents: ED 290 315, March, 21 pp.
Horowitz, E.C. (1981) 'Popularity, Decentering Ability, and Role-taking Skills in Learning Disabled and Normal Children', *Learning Disability Quarterly* 4: 23–30.
Jones, C.J. (1985) 'Analysis of the Self-concepts of Handicapped Students', *Remedial and Special Education* 6: 32–6.
Keogh, B.K., Tchic, C. and Windeguth-Behn, A. (1974) 'Teachers' Perceptions of Educationally High-risk Children', *Journal of Learning Disabilities* 7: 367–74.
Lambert, N. and Bower, E. (1962) *A Process for In-school Screening of Emotionally Handicapped Children.* Princeton, NJ: Educational Testing Service.
Landau, S., Milich, R. and Whitten, P. (1984) 'A Comparison of Teacher and Peer Assessment of Social Status', *Journal of Clinical Child Psychology* 13: 44–9.
Marsh, H., Parker, J. and Smith, I. (1983) 'Preadolescent Self-concept: Its Relation to Self-concept as Inferred by Teachers and to Academic Ability', *British Journal of Educational Psychology* 53: 60–78.
McCarthy, J.M. and Paraskevopoulos, J. (1969) 'Behavior Patterns of Learning Disabled, Emotionally Disturbed, and Average Children', *Exceptional Children* 36: 69–74.
McKinney, J.D., McClure, S. and Feagans, L. (1982) 'Classroom Behavior Patterns of Learning Disabled and Non-learning Disabled Children', *Learning Disability Quarterly* 5: 45–52.
Mercer, C., Hughes, C. and Mercer, A. (1985) 'Learning Disability Definitions used by State Education Departments', *Learning Disability Quarterly* 8: 45–55.
Ministry of National Education and Religion, Division of Special Education (1988) *Deltio plirophorion eidikis agogis* (Information Booklet for Special Education). Athens: Organismos ekdoseon didaktikon vivlion.
Nikodimos, S. and Papatheophilou, P. (1990) 'The Functioning of Special Classes in Regular Schools: Findings From a Research Study', in Greek Association of Mental Health and Neuropsychiatry of Children, *Learning Disabilities. Current Perspectives and Trends.* Athens: Ellinika Grammata.
National Advisory Committee on Handicapped Children (1967) *First Annual Report.* Washington, DC: Office of Education.
Prillaman, D. (1981) 'Acceptance of Learning Disabled Students in the Mainstream Environment: A Failure to Replicate', *Journal of Learning Disabilities* 14: 344–6.
Scranton, T. and Ryckman, D. (1979) 'Sociometric Status of Learning Disabled Children in an Integrative Program', *Journal of Learning Disabilities* 12: 402–7.
Shepard, L.A., Smith, M.L. and Vojir, C.P. (1983) 'Characteristics of Pupils Identified as Learning Disabled', *American Educational Research Journal* 20: 309–31.
Siperstein, G.N., Bopp, M.J. and Bak, J.J. (1978) 'Social Status of Learning

Disabled Children', *Journal of Learning Disabilities* 11: 98–102.
Winne, P.H., Woodlands, M.J. and Wong, B.Y. (1982) 'Comparability of Self-concept Among Learning Disabled, Normal and Gifted Students', *Journal of Learning Disabilities* 15: 470–5.