Pupils’ subjective impressions of special education have rarely been studied after the school years. In this article, memories of special education and school years in general are investigated in adults who have been diagnosed as having had reading and writing problems (dyslexia) at school. Qualitative interviews with phenomenographic analyses are employed as a research method.

BACKGROUND
Dyslexia is a reading and spelling problem that cannot be accounted for by sensory or neurological impairment, lack of formal education or low intelligence (e.g. Vellutino 1979). More recent definitions stress the role of poor phonological processing in dyslexia and tend to ignore level of intelligence (e.g. Fletcher et al. 1994, Morris et al. 1998, Stanovich 1991, Stanovich and Siegel 1994). Depending on the criteria used, dyslexia is estimated to occur in between 3.5% and 6.2% of the population (Temple 1997).

It is widely known that dyslexia impairs the acquisition of reading and writing skills during the early school years. Many researchers have presented evidence that dyslexic symptoms persist beyond those years and impair academic performance and daily life even in adulthood (Bruck 1993, Felton et al. 1990, Leinonen et al. 2001). However, according to Rack (1997), adults and children exhibit different manifestations of dyslexia in their reading and writing. Generally, the cognitive aspects of adults’ and children’s dyslexia have received abundant attention, while its emotional and social consequences have rarely been studied.

Dyslexic and non-dyslexic adults seem to have different personality characteristics. Richardson and Stein (1993) found that, compared to the control group, dyslexics appeared to show a higher level of schizotypal characteristics (e.g. inclination to magical beliefs, unusual perceptions and attentional strategies). No differences in most of the other personality traits (e.g. extraversion, neuroticism) were observed. Richardson and Stein
(1993) concluded that the higher occurrence of schizotypal personality in dyslexics might be accounted for by neural activity, the same as probably underlies dyslexia itself. This evidently innate personality trait can have an effect on the nature of personal experiences.

Poor socio-emotional adjustment is often considered an accompaniment to a learning disability. Heisler (1983) argued that language disabilities, in general, greatly affect several stages of normal psychosocial development. Tiles (1996) considered fear as a main feeling associated with dyslexia in children. He categorized four types of fear: fear of failure, fear of being different, fear of words and fear of social ‘gaffes’ (e.g. fear of disappointing parents/teachers). Compared to their peers, dyslexic children and adolescents are assumed to experience a considerably higher level of stress (Chinn and Crossman 1995, Thomson 1995). Edwards (1993) found that eight dyslexic boys at the end of their school career reported negative experiences at school, such as violence on the part of teachers, unfair treatment, humiliation and teasing/persecution. Hence, negative socio-emotional consequences suggest that dyslexics may experience their educational career differently from individuals without dyslexic symptoms.

Some previous reports have explored memories and feelings among dyslexic adults. Hughes and Dawson (1995) investigated memories of school among adults attending a dyslexia institute. The memories were predominantly negative, perhaps partly due to the biased sample. Of the Hughes and Dawson informants, 50–59% mostly disliked school and 57–64% had received no extra help to alleviate reading and writing problems. In his report on coping mechanisms, Bruce (1983) also reported negative school memories in adult dyslexics.

Adopting qualitative research paradigms, Gerber and Reiff (1991) in the USA as well as Hellendoorn and Ruijssenaars (2000) in the Netherlands found that adults still encountered the harmful effects of dyslexia in their daily life. In both countries, the informants had learned how to cope with reading and writing difficulties but still had negative memories of their school days. Moreover, Hellendoorn and Ruijssenaars (2000) found that parental support was a powerful factor protecting against the harmful socio-emotional consequences of dyslexia.

In Finland, special education for children with reading and writing disabilities expanded in the 1960s (Kiviranta 1989), when remedial teaching was mainstreamed. Now, during the primary school years, children with dyslexia attend regular lessons with their peers. They also receive part-time remedial teaching given by special education (remedial) teachers. There are one or two lessons per week (each lasting 45 min).

The main goal of this study was to investigate the experiences and memories of adult dyslexics of school, particularly special education, and the probable supportive role of the home.

METHODOLOGICAL FOUNDATIONS
Since the goal of this paper was to analyse how adults with dyslexia now experience their past and present school memories, the qualitative approach was considered relevant. It
places the human being in the centre, the goal being to understand and describe the meaning of the phenomenon studied from the informant's point of view (Glaser and Strauss 1967).

The data collected were analysed using a qualitative phenomenographic method. Phenomenography is an empirically based approach aimed at identifying the qualitatively different ways in which different informants experience, conceptualize and understand various kinds of phenomena (Marton 1988, see also Richardson 1999). The fundamental results of a phenomenographic investigation are a set of 'second-order' categories of description, that is, a perspective 'from the inside'. Hence, the researcher attempts to describe how the informants experienced the relevant phenomena (Marton 1988, see also Richardson 1999).

Marton (1992) makes a distinction between subjective and objective aspects. The objective aspect focuses on the individual's experiences in relation to those of others, but concerning the same issue. On the other hand, the subjective aspects focus on the same person's experiences concerning various issues. In this study, the objective aspect was dyslexia, which the informant clarified in a specific way. As objectively as possible we compared different individual's experiences concerning the same phenomenon: dyslexia at school.

Phenomenographic research does not strive to find the definitive truth about the phenomena. Hence, the second-order perception (of a phenomenon) arises from subjective experiences and interpretations; the researcher seeks to comprehend the perspective of the participants. He/she does not aim to judge the truthfulness of the different views. In evaluating the credibility of qualitative research one has to look at the research process as a whole, that is, to determine how logically the phenomenon under study, the theoretical approach, the methodological choices and the report of the results, fits together. According to Sandelowski (1993), the rigour in qualitative research depends on the possibility to create a meaningful portrait and landscape of human experience.

An important question in phenomenographic research is how well the created categories match the informant's apprehensions. In order to determine the credibility of the fundamental categories they are illustrated here with relevant quotations from the interviews.

However, it can be argued that the categories also represent the researcher's own interpretations of the data, and even that other researchers might in principle arrive at different categorizations. On the other hand, social phenomena cannot be understood without account being taken of subjective as well as objective factors.

GENERAL PROCEDURE

Participants
Nine participants were recruited from the group of primary dyslexic students who had attended remedial teaching during their school years. They were recruited by means of an advertisement in a student newspaper. Eight of the participants were female and they were
chosen on a voluntary basis. Females tended to be more active than males in participating in the study. The educational background of these students was heterogeneous. Four studied at university and the others at college level. Their ages varied from 23 to 30 at the time the study was carried out. The participants had started school in southern Finland in the late 1970s or in the early 1980s at a time when special education was expanding strongly in the country as a whole.

Interviews
Data were gathered by means of semi-structured interviews. The interview questions were tested in a test interview before the actual study interviews, which were carried out in a quiet room at a public library. Specific themes were stressed in the interviews, e.g. school in general, teachers, special education and the role of the home. All interviews were tape-recorded and carefully transcribed. The average length varied from 1.5 hours to 2 hours. Since the goal of the interviews was to hear the voice of a dyslexic student, interviewees were encouraged to reflect freely on their experiences and emotions concerning dyslexia at school.

The first stage of the analysis was to read through the transcribed interviews in order to find the most significant expressions. Expressions that were similar to each other formed the group ‘meaning of expressions’, which in turn was the basis for the category of description. In our design, the categories appeared to match the research goals. According to Francis (1996), this search for a meaningful structure demands the identification of distinguishing features of categories and the determination of logical or other relations between them.

RESULTS AND DISCUSSION
Our data revealed several categories. We report on the main and most interesting of these categories for the purposes of the present study: special education, teachers and the role of the home.

SPECIAL EDUCATION
All the informants had attended special education during their primary school years (Grades 1–6). Four of them had attended six years, the others usually 2–3 years during Grades 1–3, when basic reading and writing skills are acquired. One informant had still attended special education during Grades 7–9. On average, one or two lessons of remedial instruction had been provided weekly.

The first-grade teacher had usually observed dyslexia or it had been diagnosed in screening tests carried out by the remedial teacher. One interviewee said, “I think that it was found at the beginning of school, since I did not learn to read fluently until the third grade. But it (dyslexia) became obvious in the second grade and I started to go to the remedial classroom where I worked with syllables and such things.” Some participants had received remedial teaching as a normal school routine without knowing the reason. One
informant said: “But in the sixth grade I was told for the first time that this could be dyslexia. Nobody had ever said where the problem came from. I just went there (remedial classroom).” We argue that remedial teachers should be more capable of explaining to children what the reasons for their learning disabilities might be.

After diagnosis, however, not all informants had been given immediate access to special education, but because of limited resources had waited for considerable periods of time. This suggests that special education needs were underestimated when the participants were at school. We suspect that even today more resources should be directed into special education to strengthen inclusion and to alleviate the position of pupils with learning disabilities in regular classrooms.

The informants had various experiences of remedial instruction. Three interviewees said without hesitation: “It was great to attend.” Some considered it more fun to receive remedial instruction than to attend regular lessons. One participant explained: “I really liked remedial teaching. I guess it helped. It was nice to go there because the teacher was so nice. It was more pleasant there than in (regular) Finnish lessons.” Despite these generally positive descriptions of attendance at remedial instruction, some informants felt that they were labelled: two participants said, “I felt that I was somewhat different.” One informant reported bullying and commented, “I had the feeling that I was considered weird.”

How dyslexics feel about remedial or special education has rarely been examined. In general, our participants had positive experiences of remedial teaching. This finding appears to be in concordance with those of Bruce (1983), who found that adults recalled pleasant memories of attendance at the Word-Blind Centre during their school years. Similarly, adults who, in childhood, had received treatment from psychologists, remedial teachers or other equivalent professionals judged their experiences as positive. Experiences of special classrooms or schools, however, seemed to be less pleasant (Hellendoorn and Ruijsenaars 2000). Furthermore, our findings are in agreement with Kärnä-Lin (1996), who reported that Finnish students in Grades 7–9 judge part-time special education very positively. In conclusion, we assume that despite a minor degree of labelling, dyslexics experience remedial teaching as positive (cf. Fawcett 1995).

The informants had vague memories of their remedial teachers. Five interviewees said: “I have no recollection of that teacher.” One participant said that the remedial teacher might have changed during the school years. This participant added that the memories of a book read in special education were more vivid than those of the remedial teacher. The same person also assumed that the teacher was nice, because attending special instruction was enjoyable. We assume that the fuzzy memories may be due to the fact that the participants had spent only a very limited time with the remedial teachers – at least compared to their regular classroom teachers.

We suggest that vague memories of remedial teachers and of the reasons for remedial education might be due to the limited number of special education lessons and the fact that as school pupils they were not given adequate explanations about the nature of their
learning difficulty. However, we cannot rule out an alternative interpretation. It is also possible that remedial instruction had a stigmatizing effect, and that detailed memories of special education might be suppressed and not expressed during our interviews. We know that at present pupils are generally happy to attend remedial lessons (cf. Kärnä-Linn 1996), but we do not know what the school’s attitudes toward disabilities were like when our informants were in primary schools.

TEACHERS
All nine informants had both negative and positive memories of their teachers. Positive recollections were attributed to teachers at different levels of school. Four informants recalled, for example, that a certain teacher “was always supportive”. Two informants mentioned – with affection – a particular teacher who had been of great personal significance for the informant. One interviewee described her fifth-grade teacher: “But then in the fifth grade we had a superior teacher. And I really started to work. The teacher also required studying and doing homework. I think my GPA was one level higher after that year and I received a grant. And it really felt good to have someone else become aware of my abilities.”

Another informant remembered her upper secondary school teacher, who had greatly encouraged her and put dyslexia into the right context as unfavourable to learning but not indicative of intelligence or one’s general capacity. This informant said: “It helped my self-assurance. If I hadn’t encountered this teacher, now everything could be different (i.e. worse).”

Negative experiences were mainly associated with primary school teachers. The informants had surprisingly vivid memories of their first classroom teachers, a fact that probably reflects the significance of teachers during the first school years. Five informants said: “My recollections of the first school years aren’t very positive. Somehow I didn’t like the teacher.”

Some informants reported traumatic memories. One of the interviewees told about a teacher who was soon to retire. The teacher had explained to the informant’s mother that her daughter was dull because of her slow progress in reading. The informant said that she was not fond of the teacher even though, she added, as a child she could not figure out the reason. Another informant expressed her feelings: “That teacher was simply mean. I don’t remember in detail. Luckily, something is forgotten.”

Four interviewees stated that, after all, teachers do not know much about dyslexia. According to one informant: “The attitude of the teachers is that they think they know something about dyslexia, but in practice they don’t know and they aren’t interested; and they don’t bother to search for information. … I don’t know how to get teachers to learn more about dyslexia. Who could explain to them what dyslexia is all about?”

Our results appear to be in agreement with other investigations. Hellendoorn and Ruijssenaars (2000), for instance, reported similar negative experiences from the primary school years. They also concluded: “there is little evidence of knowledge and acceptance
of dyslexia among the elementary school teachers these participants encountered (p. 223).” We can confirm this statement concerning Finnish teachers. Edwards (1993), Hughes and Dawson (1995) and Bruce (1983) have also reported predominantly adverse recollections concerning teachers.

All respondents were observed to have had positive experiences usually associated with a single sympathetic teacher. Positive memories are seldom found in previous studies. Bruce (1993), however, observed some good experiences concerning single teachers. Hellendoorn and Ruijssenaars (2000) mentioned that a minority of their respondents (30%) had positive recollections of their elementary school period. Only one of their 27 respondents had a clearly positive picture of later education, while 16 were ambivalent. Hence, our results, indicating that all informants also had good experiences with teachers, appear to reflect a more positively tinged school career than previous literature would suggest.

SUPPORT AT HOME
The primary question in this category was how dyslexia was treated at an interviewee’s home. The answers were greatly influenced by the fact that eight of the nine interviewees had a dyslexic parent. “The attitude at home was very positive and supportive because my dad and my brother also have dyslexia,” explained one informant. Nevertheless, it was surprising that according to two informants their dyslexia was totally ignored at home. One of these continued, “When I went on studying I became aware of this problem (dyslexia). It was only then that I realized my father also had dyslexia. I didn’t know it before.”

All informants were asked if they had had specific remedial material at home during their school days. Most recalled that it was not common in the 1970s. On the other hand, at that time schools did not inform parents about dyslexia or how to train pupils at home. If schools recommended any material at all, it was mainly puzzles or other games considered useful in those days. As one informant said, “Yes, I remember when we bought a puzzle and I wondered why. Then my mum told me that my teacher had asked her to buy it because of my dyslexia.”

Even if only a little remedial material was available in the interviewees’ homes, parents did homework and extra exercises with their children. What is more, the parents encouraged interviewees to study. One participant recalled, “It was really hard when I was learning to read and write. I mean it was my mum who read out my homework until upper comprehensive school, because there was too much reading for me.”

CONCLUDING REMARKS
The memories of school years among adult dyslexics have rarely been examined. The present work was aimed at investigating this issue among Finnish adult dyslexics. Our findings are in agreement with previous research. Although primary school memories tended to be rather adverse, in contrast to many previous studies, all of our respondents also had positive recollections, of understanding and sympathetic teachers. We also con-
firmed the crucial role of parental support, previously reported by studies such as Hellen-
doorn and Ruijssenaars (2000).

Recently, Leinonen et al. (2001) categorized Finnish adult dyslexics into four sub-
groups. Those in one of these, Hasty Dyslexic Readers, are considered to have fairly well-
developed orthographic processes enabling them to read quickly, but at the expense of a
faultless performance. In Leinonen et al.'s (2001) study, this and another subgroup, Mildly
Dyslexic Readers, exhibited beneficial reading behaviour: compared to the two more
severe dyslexic subgroups, these dyslexic adults read more books and had a more positive
attitude toward reading. Altogether, the proportion of Hasty and Mildly Dyslexic Readers
was 79% (N = 84). Our participants, as students in higher vocational institutes or at uni-
versity, evidently possess beneficial coping mechanisms and probably belong to the two
fairly successful dyslexic subgroups. This may at least partly account for our findings on
the positive memories of the participants. On the other hand, encouraging teachers and
parental support may also have helped the informants to develop advantageous coping
strategies.

Our findings bear some relevance for developing special education. Firstly, according
to the informants, primary school teachers often appeared to have limited knowledge of
dyslexia. We believe that nowadays dyslexia is more readily recognized than in the 1970s
and the 1980s, when the informants attended primary schools. Nevertheless, even today
teacher education in Finland offers only a limited amount of training on learning disabil-
ities. Secondly, informal inquiries among university students suggest rather warm recol-
lections of primary school teachers. Our participants’ negative recollections as well as
teachers’ sometimes hostile attitudes toward dyslexic children, as expressed by some
respondents, indicate that the remedial teachers had not been successful in consulting
other teachers on matters related to dyslexia. To improve the position of dyslexic pupils,
both of these issues should be addressed seriously in the pre- and in-service training of
Finnish (remedial) teachers.

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