

“They Always Called Me Yoda”: School Experiences of Young People With Developmental Language Disorders as Reported at the End of Their Secondary Education

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Adolescents with developmental language disorders (DLD) often no longer receive support services when they reach secondary school although many studies show persistent educational needs (Conti-Ramsden et al., 2018; Kolonko & Seglias, 2008; Romonath, 2003). To date, personal assessments of their support services by students themselves have received little research attention. On the basis of interviews with three adolescents who had special speech, language, and communication needs (SLCN) at the beginning of school due to a DLD, we investigated persistent language problems, difficulties in school learning, and helpful support throughout the school years. The results of an evaluative qualitative content analysis indicate an overall positive linguistic development, especially in the area of oral language, but the young people still reported having major problems in writing texts, spelling, and reading comprehension. The young people experienced smaller classes in sound-optimized rooms as a support as well as additional support services at times. In particular, they considered the teachers' pedagogical commitment helpful, as the teachers are aware of the language impairments and encourage students to speak and ask questions. A clear structure, sufficient time, openness to questions, and willingness to repeat explanations are important supports in the classroom.

Keywords: Developmental language disorder, speech, language and communication needs, educational need; interview

INTRODUCTION

Successful academic learning requires acquiring language in all school subjects, and at the same time language is an underlying prerequisite for learning (Ahrenholz, 2010). Students' linguistic-communicative competencies are, therefore, key to successful education and have a decisive influence on school

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performance. Thus, school success and educational opportunities correlate with linguistic abilities and skills, for both multilingual students (Henschel et al., 2018; Kempert et al., 2016) and students with difficulties in the language of instruction due to language development disorders (Conti-Ramsden et al., 2009; Janus et al., 2019).

Students with language impairments perform poorly in school assessments not only in German as their first language (L1), as expected, but also in math and science (Conti-Ramsden et al., 2017; Dockrell et al., 2011; Knox, 2002). Further, poor language skills play a crucial role in the development of IQ through limited understanding of spoken and written language and possibly through lack of lexical organization and developmental delay of inner speech (Lidstone et al., 2012). In short, school achievement is affected by language abilities to a greater extent than by cognitive abilities alone (cf. Glück et al., 2018).

Within the German school system, where this study took place, children with language impairments that are expected to have an impact on learning at school generally receive specific supports when a “special educational need in the area of language” or “special educational support and counselling need” is formulated (Kultusministerkonferenz, 2011). In most cases, these needs are identified in the early grades but students generally lose their entitlement to such services during their primary school years (Glück & Theisel, 2014).

A special educational need for language support can be based on various linguistic impairments. For example, studies on students with speech, language, and communication needs (SLCN) in Germany show a change over the last 40 years in both language-related diagnoses and the range disorders prompting the need for support (e.g., Dürner & Schöler, 2000). Within the German school system, students with SLCN include, for example, children and young people with developmental language disorder (DLD), speech difficulties, stuttering, and so on. Currently, the most common diagnosis in this area is DLD, which in turn can be demonstrated at various linguistic levels (Kannengieser, 2019). Briefly, DLD is a neurodevelopmental disorder, specific to language production and/or processing (Bishop et al., 2017). The term DLD covers a wider group than the earlier SLI (specific language impairment) (Bishop et al., 2017). In particular there is no restriction for inclusion due to lower general cognitive ability. Nevertheless, the students in our sample had an average IQ.

Students with DLD have particular difficulties with the acquisition of formal language aspects, which symptomatically manifest as receptive and/or productive difficulties in the form of speech sound disorders, morphosyntactic deficits, and/or lexical-semantic deficits. Consequently, they may evidence significant difficulties with reading comprehension or understanding teacher instruction.

Speech and language support is provided in either mainstream or special schools (speech language therapy schools), with special education teachers focusing specifically on the development of language. In special schools, classes contain no more than 12 children, taught according to the curriculum of the mainstream schools but receiving specific language support, including individual support in addition to lessons, individual or small-group support parallel to lessons (pull-out intervention), and team teaching with a special language-supportive design (classroom-based intervention; cf. Theisel et al., 2016).

Despite such efforts and interventions, some students are still not able to succeed, and their learning challenges become particularly evident in secondary school (Romonath, 2003). Even students who seemed to have overcome their problems toward the end of primary school develop renewed difficulties with increasing linguistic demands in adolescence, especially in the areas of written language, language comprehension (Dannenbauer, 2002), and foreign language learning (Zoutenbier & Zwitserlood, 2019). And yet, a large percentage of these students no longer receive any school support in adolescence (Kolonko & Segilas, 2004).

The perspectives of those affected on what they consider helpful for learning at school have received little research attention in the German-speaking world. Furthermore, a national review of SLP (speech-language pathologists) services in the United Kingdom highlighted that SLPs do not always consider the views and preferences of children with DLD in the process of intervention (Gallagher et al., 2018). This is a serious omission, as inclusion of the perspective of those affected is significant because it is based on their lived experience and not on hypothetical assumptions of nonaffected people. Indeed, such an approach is consistent with the principles of the 1989 United Nations (UN) Children's Right Convention, which calls for the inclusion of children's voices and perspectives in the areas that affect them, of which education and upbringing are a particular part, and for them to be given a more active role in their development (UN, 1989). It also takes into account the UN Convention on the Rights of Persons with Disabilities, which calls for increased participation of persons with disabilities (UN, 2008). The views of those affected can help us better understand their educational needs and provide suitable educational opportunities (cf. Palikara et al., 2009).

Internationally, researchers have made only isolated efforts to consider the perspective of adolescents with past or persistent language development disorders (e.g., Lewis et al., 2007; Owen et al., 200; Tancredi, 2020). Thus, the use of qualitative methods in communication disorders research is only at an emergent stage (Lyons et al., 2022), and, "Therefore, students with DLD are at risk of being offered a set of options that are not within the spectrum of what could be available" (Tancredi, 2020, p. 206).

Among existing studies, Palikara et al. (2009) interviewed 54 adolescents with language impairment after they had completed their compulsory schooling about their support needs, experiences with the support they received from school and family, and expected future barriers on their educational path. These students, the majority of whom had been educated in inclusive programs, were aware of their difficulties and considered the support they had received at school very differentiated and, for the most part, very helpful. However, they reported that support from a teaching assistant in the classroom or an SLP outside of the classroom decreased significantly in secondary school, much to their regret.

In another study, Carroll and Dockrell (2012) interviewed 19 young people who had been diagnosed with language impairments and had been attended special schools about their school experience and their transition to vocational education. Participants gave very precise insight into their former or continuing communicative impairments and the barriers associated with them. They saw themselves as active shapers of their development and were very cognizant of the importance of the support they received, especially from their parents or the school tutors assigned to them.

A study with students in Queensland, Australia (Tancredi, 2020), highlighted several helpful adjustments of teaching practices suggested by two children with DLD. Specifically, their teachers reduced the pace and quantity of instruction, used more structure in their speech, and paired verbal instruction with pictures, videos, or text. The students also reported that they preferred to hear instruction in the whole class and then repeated with individual attention to their unique needs.

Further, a survey of parents of children with speech disorders in a Europe-wide study showed that, on one hand, children with speech disorders are at great risk of a lack of social inclusion and, at the same time, social relationships are a protective factor for better quality of life for them. For these reasons, the parents urged the inclusion of the perspective of the affected persons themselves when planning and implementing educational programs for them (Jensen de Lopez et al., 2021).

As illustrated in the above studies, valid insights into helpful or hindering educational and support measures can be gained by including the perspective of those affected. Students with language difficulties know what helps them to learn. However, other countries' education systems are often not comparable with the German system.

Individual studies in Switzerland (Haid & Isele, 2012; Kempe, 2010; Kolonko & Segilas, 2004) and in Germany (Grohnfeldt, 2003; Ritterfeld et al., 2011; Romonath, 2003; Sallat & Spreer, 2011, 2015; Theisel, 2017a; Zuckrigl

& Mahel, 1986) have dealt with the effects of educational provisions or satisfaction with the educational process in speech language therapy schools.

Sallat and Spreer (2011, 2014, 2015) captured the perspective of students. Specifically, they asked former students of speech language therapy schools about their vocational and educational qualifications and current occupational fields as well as their retrospective assessment of their place of support. The students had attended the language therapy school for an average of 2.75 years, but none of them had graduated from there, which illustrates the system's transitory nature, representing only a "temporary separation" (Glück, 2012, p. 136). According to their own statements, more than 80% have benefited from the support provided at this special school (Sallat & Spreer, 2011).

Theisel (2017) provided further data from a survey of the 2005–2015 graduation cohorts of four speech language therapy schools in Baden-Württemberg, Germany, where secondary school diplomas after 9 years or after 10 years are available (Haupt-, Realschulabschluss). The target group there are students who had SLCN until their graduation. Those affected appreciated the peer group experiences; individual support and adaptation of lessons by dedicated teachers; the supportive learning climate; and the small group sizes (Theisel, 2017b). Similarly, in the study by Haid and Isele (2012) conducted at Swiss speech language therapy schools, small classes, peers with similar difficulties, and individual support in the form of one-to-one assistance were reported to be helpful for the students.

Apart from the above-mentioned retrospective surveys of students, which mainly provide insight into the framework of the programs offered, no studies have included the perspective of the students themselves in German-speaking countries, leaving a gap in information on supporting or inhibiting factors on this path as well as the continuing need for support at the end of the formal school years.

To fill this gap in the literature, in the present study, we attempted to answer the following two questions by interviewing young people affected by DLD:

1. What makes learning at school difficult for young people with DLD in secondary school?
2. What educational supports did secondary school students with DLD perceive as helpful or unhelpful for their learning during their school years? (This includes the general educational context and qualitative teaching features.)

METHODS

From the sample of a larger study of children with DLD at the beginning of their school years (Forschungsgruppe Ki.SSES-Proluba, 2014), we were

able to reach 92 at the end of their school years. We made contact in writing and, in addition to the necessary consent for data processing, we included a parent questionnaire and a questionnaire for the students themselves. We also asked the participants who responded ($N = 30$) whether they were willing to take part in a telephone interview. If they agreed, we invited these eighth-, ninth-, and 10th-grade students ($N = 14$) to participate in a guided interview, the content of which we based on the feedback from the questionnaires (cf. Theisel et al., 2021).

SAMPLE

The interview data were collected from 14 students, who were assessed as having DLD at the start of the 2011–2012 school year. At the time of school enrollment, these students did not show age-appropriate expressive and/or receptive language performance on at least one linguistic level.

Assessments were conducted before school enrollment using the subtests PGN (Nonword Repetition), SG (Sentence Repetition), and MR (Morphological Rule Formation) of the SETK 3-5 (Grimm et al., 2010) and supplemented with the subtest Repeating Numbers from the K-ABC (Melchers & Preuß, 1991/2006). (Two students exceeded the age range of the SETK 3-5. They were tested with analogue subtests of another language development test.)

The 12 students achieved the following mean T-scores on the subtests of the SETK 3-5: Nonword Repetition: $M = 31.50$ ($SD = 7.18$); Sentence Repetition: $M = 40.17$ ($SD = 7.89$); Morphological Rule Formation: $M = 39.75$ ($SD = 7.94$). In the subtest Repeating Numbers (ZN) of the K-ABC, subjects' performance transformed as T-scores was $M = 40.54$ ($SD = 9.15$). All students showed a DLD at this time; that is, at least one subtest was minimum one standard deviation below the mean (including the two students on whom other language data were available).

At the beginning of their schooling, 12 of the students attended one of the various special needs education and counseling centers for language (speech language therapy schools) in seven districts of Baden-Württemberg. Two attended other primary mainstream schools. All students grew up monolingually.

For the purpose of this article, the interview data of three students were selected, based mainly on the schooling biography and because their description of the experiences was more detailed. This was done to avoid the methodological dilemma of interviewing a language impaired student whose answers are mostly very short.

All the selected students had received language support at school for at least four years, thus ensuring that substantial experiences of language support were available. Students were divided into three groups, depending on the length of additional time of language support and schooling they had received

in the language therapy schools; (a) until Grade 4; (b) until Grade 6 or 7; and (c) until end of secondary school, mostly Grade 9. The three students selected represent these groups and got their language assessment as mentioned above and illustrated in Table 1.

In the following, the educational backgrounds of three of the young people (Anna, Johann, and Fabian – names have been changed for data protection) will be traced from the interview data. Table 1 provides the assessment data from school entry (T1) and from the end of Grade 4 (T4). The subtests Sentence Repetition (SG) and Morphological Rule Formation (MR) are part of the P-ITPA (Esser & Wyszkon, 2010).

Anna

Anna (Interview I06) was enrolled in a language therapy school in first grade and remained there until fourth grade. At the end of Grade 4, her cognitive performance was within the normal range with an IQ standard score of 93 (measured with CFT 20; Weiß, 2006). Her academic performance in reading and mathematics was also within the normal range but not in spelling. The educational entitlement was removed at the end of Grade 4.

In fifth grade, Anna transferred to a local mainstream school and wanted to earn a secondary school diploma there at the end of the 10th grade. The move to the new school was a big adjustment and brought many difficulties, particularly communication with the teachers, who, in Anna's view, had no expertise in language development and no knowledge of the problems she still had, all of which was challenging. Anna's career goal is to become a confectioner or fashion designer.

Johann

Johann (Interview I07) also began his school career in first grade at a language therapy school. At the end of Grade 4, his cognitive performance remained in the average range with an IQ standard score of 89; his performance in reading was also average, but not in mathematics and spelling.

He remained at the language therapy school for two more years and then transferred to a local mainstream school. There, he worked for a secondary school diploma at the end of Grade 10. His career goal is to become a carpenter.

Fabian

Fabian (Interview I01) was also enrolled in a language therapy school in first grade. He already showed signs of a reading and spelling disorder at the end of the first and second grade, and his performance in these areas was far below average. His cognitive performance at the end of Grade 4 was average, with an IQ standard score of 90. His entitlement to SLCN services was extended.

Together with his parents, Fabian decided to continue attending a language therapy school, although it was far from his home and he had to live in

the boarding school attached to the school. There, he would like to achieve a secondary school diploma at the end of Grade 10. Therefore, he still received SLCN at the time of the interview. His career goal is to become a locksmith or agricultural machinery mechanic.

Table 1. *Language Performance Tests T1 and T4 (T-Value Scores)*

Measuring Times	T1	T1	T1	T1	T4	T4	T4
Assessment Instruments	SETK SG	SETK PGN	K-ABC ZN	SETK MR	P-ITPA SG	K-ABC ZN	P-ITPA MR
Johann	38	39	43	39	34	43	35
Anna	54	26	30	36	32	33	39
Fabian	51	49	54	33	50	50	37

Survey Procedure

We used contents from the aforementioned questionnaire to prepare the content of the interviews. We used a semi-structured, open-ended interview format to explore the students’ experiences. The questionnaires contained items to assess (written) language and arithmetic skills, social integration, and communicative competences (cf. Theisel et al., 2021; for an update, see Glück et al., 2022). The interviews were conducted via video conference or telephone and recorded. Each lasted 30 – 45 min.

The interview format was divided into the following key topics with specific questions within each: language difficulties from the past to today, school experiences (dealing with language requirements, social integration), and career choice. The themes served as a general outline. Whenever the students brought something up that was related to the key issues, we encouraged them to talk about it.

Data Evaluation and Analysis

We prepared the interview data for further analysis. First, we transcribed the audio recordings. A project staff member completed the transcription using the transcription rules for computer-assisted analysis according to Kuckartz (2018). We checked the transcripts and resolved cases of doubt (often proper names, dialectal expressions) by consensus as far as possible; otherwise, we excluded the utterances in question. Then we imported the data into MAXQDA 2020 for further analysis. We analyzed the data from the guided interviews using evaluative qualitative content analysis (Kuckartz, 2018), which largely corresponds to the procedure of a content-structuring qualitative content analysis.

Accordingly, we developed thematic main categories based on the questions and used them to code the data. In the presentation of results, we cite the respective text passages from the transcripts in parenthesis. We provide the number of the interview first, followed by the line of the transcript (e.g., I12, Item 204).

Although the interviews were conducted in German, the quotes are presented in English for comprehension reasons. We tried to incorporate German grammar errors into the translation where possible to convey a sense of (in-) correctness. Unexpected terminations in words or clauses are marked with “-,” omissions of parts of the quotes are marked as usually as “...,” additions by the authors in square brackets, pauses up to three seconds as “(...)”.

RESULTS

In the following, we present the major findings from the three interviews, including direct quotes from the students, allowing them to speak in their own words.

Difficulties in Learning at School

The difficulties that the students experienced at school due to their language impairments can be divided into three categories: work behavior, language/written language/foreign language, and classroom participation.

Work Behavior

All three adolescents mentioned difficulties in work behavior, including needing extra time in class, such as on tests: “So calculating there have to be – There I already need my time” (I07, Item 50). “Well, I’m quite slow, and then I don’t finish” (I06, Item 352). This need for increased time must be seen in the context of their language difficulties. The students take longer to comprehend unfamiliar texts and to memorize new learning content.

Learning and Using Language

Complex working memory has a significant influence on learning in school. The young people find it difficult to remember content or work instructions. Multiple requests occurring at the same time can cause a memory overflow, which means that the latest work instructions cover up the previous ones: “Well, I already forget a lot because if always there is something else and I still want something, I actually forget it” (I07, Items 280–281). “If there are always so many people wanting something from me, then yes, I’m not so concentrated” (I07, Item 283).

The difficulties related to language memory are also partly connected with formulation difficulties, which can stem from problems in word retrieval and/or syntactic–morphological planning. Fabian reported, “Nevertheless, I still quite often (...) have difficulties expressing myself correctly and saying ... the right words” (I01, Items 90–92), and “But I miss – I sometimes forget the words, what I want to say. I don’t know how to say it for a moment. And then, then it

actually comes out. So, I have to think about it a bit first” (I07, Items 32–35).

Anna reported particular difficulties in understanding the meaning of language or reading: “Comprehension is the main problem So, in German, it’s how I read the task and then interpret [it]. It depends on the language in which it will be written. In English [as a foreign language], it is even more difficult with the vocabulary” (I06, Items 35–42). She, therefore, finds it difficult to make sense of texts and summarize essential content “because most of the time, I just don’t understand at all. I just ... uhm ... read, but actually I don’t understand what I’ve read” (I06, Items 178–179).

In retrospect, all three adolescents reported that their speaking (articulation) improved significantly in their time at school, even if problems can still occur, especially under (time) pressure: “Yes, if I were to go really fast now, then I mumble quickly, and then people don’t understand me like that” (I07, Items 268–269).

In the young people’s perspective, their oral grammatical skills improved although residual deficits cannot be ignored in the interviews: “I have, of course, my speech deficiencies to earlier became better or comes – became – is no longer so obvious” (I01, Items 87–89). “I used to be called Yoda in kindergarten and in my hometown, I live in a small village, because I spoke a bit worse than Yoda” (I01, Items 102–107). Nevertheless, Fabian sometimes has difficulties “formulating in the right sentence structure” (I01, Items 84). This is particularly evident when they write texts: “If I as to say had to write a free text or a story, it would be – I can already write what I think and things like that. It’s just that it’s difficult to write in a way that everyone understands” (I01, Items 125–133).

All interview participants mentioned spelling as a problem area that leads to illegibility for others or even for themselves. It also manifests itself when they write their own texts: “My two worst subjects, I would say, are German because of spelling and English because English has a more difficult pronunciation and I have dyslexia” (I01, Items 183–187).

English as a foreign language is a particular challenge for the young people because of the difficulties mentioned above: “I don’t think I can speak very well, but I do understand a lot” (I07, Items 56–58). Fabian points out the differences in spelling, as spelling is more phonetic in German: “On English, it’s the spelling because in German, a lot of words is actually still written the way you speak, and in English, they’re just not” (I01, Items 203–206).

The difficulties mentioned are also reflected in the students’ the ninth-grade grades in English. Fabian and Anna both got a grade of D (sufficient) and Johann a grade of C (satisfactory).

Classroom Participation

Students with language impairments are often reserved in their oral participation in class. This reluctance is also reflected in the three young people’s

statements: “I don’t like is presenting at all ... in front of the class. Then everyone look at you and wait to hear what you say, and speaking freely is also really difficult” (I06, Items 171, 198–199). However, this reticence to speak occurs not only when they speak in front of others but also in class discussions: “Well, when I have to present alone, I’m not like that” (I07, Item 148). “I don’t like uhm to talk for a long time. I’d rather do something” (I07, Item 159).

The three students deal with their difficulties in very different ways. Anna tends to hide her problems: “Yes, I’m not the kind of person who says straightaway where I have difficulties” (I06, Item 234), which is why she is reluctant to ask questions in class: “Maybe some – if I think my classmates will laugh at me then sneakily” (I06, Items 129–130).

Fabian, on the other hand, deals with his problems proactively: “It used to bother me because I was teased about it, nowadays, when I tell people, they are extremely (...) surprised ... Then they ask me how I did it ... and it just doesn’t bother me anymore” (I01, Items 850–862). In the course of his school years, he has learned to see his difficulties as an opportunity: “Often, people who have a problem and get upset about it so that they can have it come – and I – they said that I don’t have any or are jealous of me; then I often say that for the simple reason that I probably had more problems than him, but I managed to solve them I have gained experience with having problems, with trying to solve problems, and I wouldn’t say that I never had these problems You have your problems, you have to solve them- look for this way to solve them and not always hide these problems” (I01, Items 872–896).

Helpful Support Measures

All three young people gave very valuable insights into what has helped them despite their challenges or what they think would help them. These insights refer, on one hand, to the teachers’ work in the classroom and, on the other hand, the general school conditions.

Teaching

The students see the teachers’ basic understanding of language impairment and the associated disadvantages as positive. On one hand, this is reflected in teaching adjustments, such as more time for repetition and asking questions:

“They just give you the time you need to write, to read, to look I can ask the teachers much easier what they mean or they try to tell us. That helps me a lot, and if I really don’t understand something, the teacher is – stays there, tries to stop at that point where I don’t understand, and then tried to explain it to me so that I understand it.” (I01, Items 294–304)

In addition to time and space for reflection and repetition, encouragement to ask questions is also central because, as Anna impressively stated, problems in understanding often arise but the young people often do not have the courage to ask questions for various reasons. This encouragement to ask

questions and ask for support is centrally related to the emotional support the teachers provide.

The subjectively perceived emotional support gives security even in difficult task formats and in the case of demands on work behavior: “You can have your two or three minutes to think, to take a deep breath and to come forward, and even in our presentation, there could – there would – you can ask the teacher, and he will help you as best he can” (I01, Items 545–549).

This emotional support is also reflected in the feedback that the students receive from their teachers. Here, the young people experience feedback (e.g., related to classwork) that focuses on mistakes as not being very supportive. When we asked Anna what she would recommend that teachers do differently, she answered, “Don’t always write down the same thing, because I know that I have difficulties there ... Most of the time, they write negative things, and it becomes – it makes you a bit more negative and depressing. Just write more positive things underneath that you’ve done well” (I06, Items 266–271). This effort would contribute significantly to improved motivation because young people have to learn to deal with many difficulties.

In addition to providing motivating feedback, the students mentioned that it is helpful to train them in recognizing their own mistakes: “They try to make your – draw your attention to this mistake so that you fix it, see I’d better say They explain how they ... if you made a mistake, how they recognized this mistake, so that you [4-s pause] can reflect on yourself for once” (I01, Items 496–511). Fabian experienced using mistakes to advance his learning process and thereby develop his own very supportive coping strategies: “If you have finished the sentence to see if I have got the sentence right – can I change something about it so that it sounds better or something” (I01, Items 512–518).

This productive way of dealing with mistakes also includes noticing the students’ difficulties and actively helping them deal with them: “The teachers really try to tackle your mistakes, your weaknesses, as best they can and fix them” (I01, Items 552–553).

In addition to this basic supportive attitude, which acknowledges the young people and their challenges and addresses them in a supportive manner, structuring is indispensable to understanding and memorizing content better. This requires great clarity in teacher action and language: “What I don’t like is when my teachers sometimes don’t have a plan and then talk very confusedly. Then it is difficult to follow” (I06, Items 81–82).

General School Conditions

Regarding the framework in which lessons and support take place, the young people emphasized several aspects that were helpful for their learning: “Because the room is not too big, uh, because the room is not too loud, because there are so few students, because he can concentrate better on the teacher” (I01,

Items 1116–1118). The students can concentrate better in a smaller class and possibly in an acoustically optimized room design.

Likewise, offers of assistance in addition to the lessons are evaluated as positive: “If you offer help after or before the lessons, if the teachers offer help where it explained ... to me again alone or in pairs” (I06, Items 137–139).

The same applies to offers of pullouts, which take place parallel to school subjects so as little subject matter as possible is missed: “When I was in about the third grade, I had dyslexia, and he always took me of subjects out like maths and things like that Of course, I improved in German, but at the same time, I got worse in maths because I wasn't in maths” (I01, Items 347–353). “But I would just make sure that he [fictive pupil] also gets a good grasp of these subjects, learns something from them. That he is not completely expelled from this subject, I would say, or falls” (I01, Items 454–459).

DISCUSSION

Major Findings

The first research question aimed to capture the difficulties learning at school as a result of DLD from the perspective of the young people. Differences arose between the individual profiles, which were influenced by parents, friends, general conditions of schooling, extracurricular support measures, and so on, so that even an unfavorable language-learning situation at the beginning of school can lead to positive learning and hence school development.

The three adolescents reported an overall positive linguistic development, especially in the area of oral language, but in written language as well as in the acquisition of foreign languages, problems remained until the end of school (Dannenbauer, 2003). Here, participants' focus was particularly on writing texts or spelling, which sometimes leads to texts that are illegible, even for the students themselves. This finding is in line with the results of previous research in German-speaking countries (Kolonko & Seglias, 2004, 2008; Romonath, 2003), which showed clear connections between DLD and written language disorders in adolescence. They were particularly evident in adherence to spelling rules and conceptualization and realization of texts as well as in reading comprehension because fast, fluent reading and grammar comprehension are also impaired. Therefore, the young people can only use reading to a limited extent to acquire knowledge of the world and thereby expand their own linguistic competencies, which, in turn, contributes to making learning more arduous and hinders school performance if the students do not receive adequate support.

The second research question addressed the general school conditions and the guidance the teachers offered. The interviewees mentioned smaller classes in sound-optimized rooms and occasional additional support services as supportive. They are to be counted among the school conditions.

The students experienced teachers' pedagogical commitment as particularly supportive when teachers were aware of and understood their linguistic impairments. Further, the students perceived teachers as approachable beyond the classroom when they succeeded in creating a classroom climate in which the students feel recognized with their weaknesses and strengths. Adolescents with DLD are experiencing significantly more social stress than adolescents with typical language abilities because "they feel vulnerable in social situations as a result of having a special educational need in a mainstream educational setting" (Wadman et al., 2010, p. 428). When students with typical language abilities and students with DLD are taught in the same classroom, there is always a need to consciously address the fact that weaknesses, difficulties, and learning problems are not negative, asking questions is encouraged, and mistakes are always an opportunity to learn or discover something new (Theisel et al., 2022). The creation of such an environment is not a matter of course but is the result of daily, painstaking work in the classroom and is what makes effective learning possible in the first place, especially for students with language impairments.

The students considered lessons supportive when they are clearly structured with aids that support language and text comprehension and when teachers provide enough time and openness for questions and multiple explanations. These results are in line with the interviews of the Australian adolescents, who also expressed a wish for repeated explanations and access to multiple means of instruction (Tancredi, 2020).

In this way, the young people notice essential quality features of teaching that Hattie (2009) identified as essential in his meta-analyses. In their summary focused on lesson planning, Hattie and Zierer (2020) highlighted feedback ($d = 0.51$), the teacher-student relationship ($d = 0.63$), and the teacher's clarity ($d = 0.90$) as particularly effective: "Thus, it is expertise that is evident in the pedagogical context in that the teacher's actions are characterised by caring, control and clarity" (p. 17). To achieve this goal, knowledge of the learners' starting point and their stage of development is crucial:

It is a matter ... of understanding where the learners are starting from and how it can be possible to close the gap between where they are starting from and where they want to get to, namely the criteria for success. (Hattie & Zierer, 2020, p. 17)

This goal requires professional competence on the teacher's part regarding the impairment (i.e., knowledge about language development, language disorders, and their interaction with school learning and hence didactic expertise). One aspect is the planning and implementation of regular phases of repetition and practice: "Successful teachers see learning as hard work and facilitate varied, regular and challenging phases of practice" (Hattie & Zierer, 2020, p. 19).

Clearly, young people themselves can clearly provide valuable advice that is in line with international research findings on how school learning can be made supportive. Further, the interviews also show that the quality features of speech and language therapy identified in research on the quality of teaching for primary school children with DLD also apply to the teaching in secondary school (cf. Theisel, 2014). Specifically, they include consistent assurance of language comprehension through teacher speech, visualizations, the sifting of the linguistic demands of all instructional materials, the use of language-accompanying aids, and the overall structuring of the teaching process.

The answers of the young people who were educated in various settings revealed clear differences, especially in the pedagogical self-image and hence in the teachers' basic attitudes. In the mainstream school (i.e., with teachers without expertise in special needs education), the young people missed the empathy and background knowledge required to meet their linguistic needs as well as the support in learning and the motivating encouragement they assess as necessary for success. Without these features of quality teaching, the young people may try to hide their problems, thereby missing important developmental opportunities.

Limitations

Despite the insightful findings, several limitations bear mentioning. First, when recruiting participants, we sought young people whose need for support extended into adolescence and who, therefore, tended to have persistent problems. Even though this sampling method helped us capture the diversity of phenomena, it leads to an overestimation in terms of representativeness in the frequency and severity of language problems in adolescence (Glück & Theisel, 2014).

Second, the interviews showed that this method is suitable for gaining a better understanding of the background of the young people's answers in the questionnaires and to possible difficulties in understanding during the interview. However, it also became clear during the interviews that this method has limitations for people with language impairments. For example, it was not uncommon for participants to give brief answers to open-ended questions, which we then had to supplement by repeating questions. In some of the 14 interviews, for example, the interviewees' speaking time was disproportionately high. Frequent sentence breaks, repairs, incomprehensible passages, and longer pauses in the utterances made transcription difficult, as interpretative decisions had to be made for transcription.

Implications and Future Research

In addition to cognitive and linguistic impairments, DLD can also have psychosocial consequences (Hartmann, 2002), including social withdrawal (Grimm, 1999). Consequently, it is important to pay special attention to this matter to support adolescents in the mainstream school system where they no

longer receive special educational support. “The risk of not identifying difference is that children are unlikely to receive the requisite support for access and participation” (Gallagher et al., 2018, p. 129).

Through the statements of the three participating students, the present interview study showed that young people can provide differentiated, helpful information about their difficulties and needs – a fact that underscores the demand for increased participation in research of those affected as a way of including their point of view to create improved learning conditions.

This investigation highlighted the barriers existing in the learning of students with DLD and what could help them to learn. Teachers should explore the views of their students to conceptualize them as agents in their own lives and ask them about their ways of thinking. Little is still known about the impact of SLCN on everyday activities or participation from the children’s own perspectives. Teachers can support students with SLCN in all types of schools by familiarizing themselves with their linguistic learning requirements, developing an understanding of them, and taking them into account in the teaching process. In particular, constant encouragement to ask questions if they do not understand as well as emotional reinforcement and support through positive feedback, even in the case of less successful written or oral contributions, are helpful. Finally, it is important to let students make themselves heard. Children with SLCN want to be engaged in decision-making surrounding their education (Roulstone et al., 2016), and there is a strong human rights mandate (UN, 1989, 2008) to do so.

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