On Being Twice Exceptional in Sweden—An Interview-Based Case Study about the Educational Situation for a Gifted Student Diagnosed with ADHD

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Abstract: The gifted education research area is rapidly expanding in Sweden. In the context of very limited research nationally, demands are increasing for steering documents and addressing of student and teacher needs in practice. However, Swedish research on students that are ‘twice exceptional’—students classified as being both gifted and disabled (for instance, through a neurodevelopmental disorder such as ADHD)—is nearly non-existent. In this study, we present an exploratory single case study of a female student in school year seven based on semi-structured individual interviews with the student and her two guardians regarding her educational situation. The data were first inductively coded and triangulated in collaboration between three of the authors. A fourth author later independently and deductively coded one-third of the data based on the previously inductively determined thematic structure and conducted a consensus interrater reliability check, exceeding 85% percent agreement. The three main themes are as follows: (1) multiplex perspectives on academic outcomes and expectations, (2) the intersection between twice exceptionality and academic work, and (3) information and perceptions about twice exceptionality. The results indicate several educational challenges and opportunities for twice exceptional students. Further research is needed regarding twice exceptional students in Sweden.

Keywords: case study; gifted education; inclusive education; special needs education; talented education; twice exceptional; 2e

1. Introduction

This article presents an exploratory single case study of a female student in the seventh school year who is considered twice exceptional (2e), being both a gifted learner and diagnosed with ADHD. There is a pressing lack of Swedish research on 2e students and their experiences of and wishes for the educational system. This study is based on individual interviews both with the student and with her guardians.

1.1. A Brief History of Twice Exceptionality

The idea of twice exceptionality and 2e students is a recent one, even though Whitmore [1] in 1981 had already argued that “[i]nterest has been growing in identification and appropriate education of gifted students with handicapping conditions”. Additionally, some researchers claim that allusions to 2e students can be traced back to at least the early 20th century [2]. However, approximately 20 years ago, Brody and Mills [3] (p. 282) noted that, at the time, many people had difficulties “comprehending that a child can be gifted and also have learning disabilities”. Klingner [4] (p. 1) argues that similar conceptions about 2e students still prevail. Foley-Nicpon et al. [5] (p. 169) note that the term ‘twice exceptional’ has only recently become known by educators, and Dare and Nowicki [6] write that educators previously tended to find the concept of having high intelligence and learning disabilities inconsistent because intelligence was considered a global construct. According
to Brody and Mills [3], children with both special needs and high abilities tended to not be identified or provided with appropriate educational provisions. Unfortunately, more recent studies have found that similar tendencies are still commonly found [7], even though awareness of twice exceptionality among special needs educators and other professionals in the field of gifted education is increasing [8]. Among regular classroom teachers, on the other hand, awareness of the concept of twice exceptionality remains scarcer [5]. Similarly, researchers have found that there is a lack of policies or legislation relating specifically to 2e students [9].

In Sweden, historically, there has been a lack of research and practice for gifted students. However, due to revised steering documents and an increased awareness of the international research field and its expansion, resources are becoming increasingly available to build knowledge nationally in both research and practice. For instance, in the Swedish Education Act [10], it is stated that students’ different needs shall be respected and that students shall be provided provisions sufficient for them to develop as far as possible. Additionally, according to the national curriculum for compulsory school [11], education shall be adapted to students’ different needs and preconditions. Among the prevailing differences, of course, are high abilities and disabilities; however, there is almost a complete absence of Swedish research regarding 2e students so far. Such research would benefit from an increased emphasis on the identification of 2e students.

1.2. Definitions, Characteristics, and Identification

There are several definitions and characterizations of 2e students in the literature. For example, Dare and Nowicki [6] (p. 208) write that 2e students “have high abilities and co-existing learning difficulties”. Some researchers have identified 2e students as those “who possess high ability in one or more talent domains along with one or more disabilities” [12] (p. 1615). Alternatively, Klingner [4] (p. 1) defines the term ‘twice exceptional’ as “being gifted (highly able) and having challenges with learning or physical disabilities”. A definition that has been used by several researchers was given by Reis et al. [13], according to which 2e learners are students who “demonstrate the potential for high achievement or creative productivity in one or more domains such as math, science, technology, the social arts, the visual, spatial, or performing arts or other areas of human productivity AND who manifest one or more disabilities as defined by federal or state eligibility criteria” [13] (p. 222).

Several very recent articles also include educational needs or requirements in their definitions of twice exceptionality or of 2e students. For example, Hulsey et al. [14] (p. 16) describe twice exceptionality as a “blend of gifted and special education characteristics (“exceptionalities”) that require a flexible educational approach”. In a similar vein, Lien et al. [15] (p. 2) define 2e students as “those who have coexisting giftedness and disabilities in one or more domains that need support from both gifted and disability education”.

Further adding to the difficulties in defining twice exceptionality is the fact that several of the words included in many of the definitions presented above—such as “giftedness”, “high ability”, “disabilities”, and “learning difficulties”—are in themselves difficult to define and have received multiple and differing definition proposals in the literature. For example, Sims [16], surveying over 90 research articles, found more than 70 traits and abilities that, alongside having a high IQ, factor into different definitions of giftedness. Similarly, Klingner [4] (p. 1) states that “[u]nfortunately, there is no consensus among educators and psychologists for a comprehensive definition of gifted [sic]”. Baldwin et al. [17] also highlight the importance of defining twice exceptionality, stating that there has been no unified method for bringing together the best research into a single definition and that no single definition has been acknowledged by both researchers and practitioners.

Due to the complex and varied nature of the compound notion of twice exceptionality, “[t]wice-exceptional students exhibit many combinations of abilities and difficulties” [6] (p. 208). Firstly, giftedness or high ability may be in one or several areas. Secondly, there might be several different kinds of difficulties or disabilities. For example, some researchers
claim that “[l]earning difficulties may stem from attention deficits, specific learning disabilities (dyslexia, dyscalculia, dysgraphia, etc.), communication disorders, emotional and/or behavior disorders, physical problems, and/or sensory issues” [6] (p. 208). Other lists of disabilities include “specific learning disabilities; speech and language disorders; emotional/behavioral disorders; physical disabilities; Autism Spectrum Disorders (ASD); or other health impairments, such as Attention Deficit/Hyperactivity Disorder (ADHD)” [13] (p. 222). Thus, some children who are identified as 2e are diagnosed with ASD [18,19], others with ADHD [15,20], and so on.

This mix of combinations implies that twice exceptionality has a multifaceted nature [8]. Some researchers use abbreviations to distinguish between different forms of twice exceptionality such as ‘G/LD’ (gifted with learning disabilities) [21], ‘2e-ADHD’ [22], or ‘G/T/SLD/ADHD’ [6] (p. 208), and some researchers use the phrase ‘alphabetic children’ [23] to refer to 2e children. This multitude of possible combinations also means that it is particularly difficult to draw true generalizations regarding 2e students.

Further adding to the difficulties of the identification of twice exceptionality is the fact that disabilities and giftedness often mask each other [9,14,15,19]. For example, “high cognitive ability may hide disabilities, at least for a while, and severe learning weaknesses may obscure a gifted student’s intelligence” [14] (p. 16). It has also been repeatedly reported that many 2e students “score lower on composite intelligence scores due to their areas of weakness […] and so fail to meet the criteria for identification as gifted” [6] (p. 208).

On the other hand, it has been found that proper identification of 2e students has several positive effects, for example, on the self-esteem of the student identified as 2e [20]. One of the mechanisms behind this is that effective identification can lead to more effective educational approaches for the support of the 2e student, such as acceleration opportunities, which have been shown to have a positive influence on self-esteem [20]. This will be detailed more below (see Sections 1.4, 4.1 and 4.2).

1.3. Prevalence

Due, among other things, to some of the challenges raised above regarding masking and to low levels of awareness of twice exceptionality, it is difficult to judge the prevalence of twice exceptionality. Some researchers suggest that up to 7% of school-age children may be 2e [8]. Another source has estimated that around 6% of students in the US are 2e (cf. [15]), while some studies have found numbers as low as 0.015% [24]. Some have suggested that “5% to 6% of children with disabilities may also be gifted and talented” [2] (p. 69), which would yield a much lower total number among the population at large. Thus, estimates vary substantially, and accordingly, some researchers have suggested that estimates of prevalence should be interpreted with caution [18,19].

1.4. Consequences, Academic Achievement, and Psychosocial Well-Being

Lee and Ritchotte [2] claim that the relative lack of understanding of twice exceptionality is a barrier to nurturing the students’ talents. It might also lead to underachievement in school and to frustration [6,25], have negative effects on their socio-emotional well-being [20,21], and therefore lead to long-term negative outcomes for these individuals. Several studies have found that 2e students are vulnerable in psychological traits and often exhibit low-academic self-concept, low academic self-efficacy, and low self-esteem [14,20,26,27]. These vulnerabilities may cause the unreasonably high risk of academic failures of 2e students found in many studies [25,26]. Wang and Neihart [26] claim that the support and care from parents, teachers, and peers are important in order to reach a high academic self-efficacy for 2e students. It is also vital for 2e students’ well-being to create positive attitudes toward schooling [26]. Wang and Neihart [26] also show the importance of focusing on 2e students’ strengths in their areas of interest. When a student is allowed to succeed, it will likely lead to an increase in academic self-concept. Wang and Neihart also suggest that this will support “positive emotional and behavioral outcomes in their learning” [26] (p.70).
1.5. Parents

Although parents are vitally important for 2e students and have a high impact on their development and experience in school, there are many aspects of parenting 2e students that have not been properly studied in prior research. For example, Mun et al. [28] (p. 533) argue that whereas parents “play a vital role in identifying and cultivating talent for diverse gifted children […] their experiences with schools and educational leaders are rarely studied”. Similarly, Dare and Nowicki [6] argue that few studies have examined how parents experience the identification of, or become aware of, their children’s twice exceptionality. Interestingly, they also report that in all cases included in their study, it was the parents who were the initiators in the process of identification [6]. Another study [14] found that among surveyed parents of gifted children, 72% of the parents of gifted-only students had suspected giftedness before the age of school entrance, while the number among parents with 2e students was as high as 90%.

In their study, Dare and Nowicki [6] (p. 215) found that “parents told how frustrations manifested at home in tears, anxiety, and self-doubt” and that every parent in their study stated that “their children had experienced some level of frustration due to their twice-exceptionality”. Parents can also play an important role in the academic success of their 2e children. For example, Wang and Neihart [27] (p. 148) found that “supports from parents, teachers, and peers influenced 2e students’ academic achievement by mediating three behavioral and psychological variables: strategies use, academic engagement, and academic self-efficacy”.

It is also important to note that the lack of studies on 2e students, not the least in a Swedish context, likely means that parents have a limited amount of information to base their beliefs and strategies on. This might contribute to an increased risk that parents may not be able to advocate for their 2e child as effectively as otherwise (cf. [6]).

1.6. Peers

Similarly, peers can be of huge advantage for 2e students, but they can also cause them problems. Prior research paints a complex picture of the relationships between 2e students and their peers. Several studies report that 2e students are “exposed to peer rejection” and “can feel isolated due to not finding ‘true’ peers with whom they can share interests and passion toward specific topics” [25] (p. 1). On the other hand, it has been found that difficulties that have been traditionally associated with the ADHD condition in peer and academic realms can be compensated by giftedness in the case of gifted/ADHD students [20]. Moreover, “the coexistence of two opposing conditions can result in a paradoxical way of constructing meaningful relationships with peers” [25] (p. 1) for 2e students. It has also been found that peers identified as friends to 2e students “clearly recognized the potential and strengths of the [2e] students, and could visibly identify the areas in which the [2e] students were at their best, both academically and in the social/emotional realm” [25] (p. 5). Moreover, these friends showed admiration toward the 2e students and took pride in their accomplishments [25]. Interestingly, the friends managed to identify both sides of the 2e students’ characteristics, since they “enthusiastically referred to their friends’ strengths, but they could also appreciate the areas in which they struggle” [25] (p. 7).

1.7. Educational Provision

Among the most common educational strategies for meeting the intellectual needs of gifted students in general are ability grouping, enrichment, acceleration [29,30], and differentiation [17,19].

Several studies have found that educators focus their responses to 2e students on support in areas of weakness and management of inappropriate classroom behavior, but not on support in areas of strength [6]. This might be due to a more general tendency to disparage and mistrust students with disabilities, which might take on different expressions, such as not thinking that a student with a certain disability is able to perform and participate
in a certain activity, relating to what has been coined ‘the impossibility view’ in prior research [31].

In a recent review of literature on 2e students, it was found that the most important educational measures to be taken in order to promote the students in inclusive settings were “teacher preparation, […] a continuum of special education interventions, […] collaboration with parents and specialists, and teachers […] focus[ing] on developing strengths as much as remediating difficulties” [32] (p. 1). The authors conclude that it is thus possible to effectively teach 2e students in an inclusive educational setting. It should be noted, though, that the term ‘inclusive education’ is an ambiguous term in the research literature [33], which can thus take on quite different meanings.

Other researchers have also pushed for the importance of highlighting and building educational strategies upon 2e students’ strengths. For example, Baldwin et al. [34] suggest that effective educational strategies aimed at 2e students include addressing the student’s strengths and interests, providing social and emotional support, offering adaptations for academic strengths while also offering accommodations for learning needs, and creating a supportive problem-solving culture that values the success of every student.

It has been found that 2e students consider their teachers’ effective emotional engagement with them a key factor for their academic achievements and success [35]. But, since 2e students “may experience difficulties that impact their behavioral and academic engagement or how they demonstrate engagement teachers may not have the resources to meet the needs of these students or interpret non-typical signs of engagement” [14]. Thus, educating 2e students has been suggested, by Lee and Ritchotte [2], to require school personnel to be trained in recognizing the characteristics of these unique learners.

Similarly, Baum et al. [36] suggest three major aspects of an educational program for 2e students. The first is the comprehensive identification of students’ strengths, interests, and talents. The second key is to address student weaknesses contextually within an enriched curriculum so students can apply and transfer skills in authentic ways. Finally, they recommend assessing progress by evaluating specific growth over time instead of measuring 2e students by grade-level expectations, since their development patterns might oftentimes differ from what is typically expected.

1.8. Aim and Research Questions

At the background of the extensive international research that was briefly described above about 2e students and their educational provision, the apparent utility of such research for both students and teachers, and the lack of research relating to twice exceptionality in Sweden, it is relevant to start conducting research about the educational conditions for 2e students. The research described above shows that the educational provision for 2e students needs improvement, and this study contributes to this by providing detailed insights into educational challenges and possible improvements in the educational situation of a 2e student. Conducting exploratory studies about the experiences and educational needs of 2e students and their guardians is a way to pave the way for theories about educational experiences and successful and less successful education. Such theories can in later studies be tested on a large scale in Sweden and in the longer run may also affect the international field of research. Thus, the aim of this study was to conduct an exploratory single-case study about educational experiences and needs from the perspectives of a 2e student and the student’s guardians. Our research questions were:

- How do the 2e student and her guardians experience her educational environment in school?
- What wishes do the 2e student and her guardians have relating to her educational environment in school?
2. Materials and Methods

2.1. Overview and Participants

This study is an exploratory single-case study about the educational situation of a 2e female student in school year 7 based on repeated semi-structured and individual interviews with the student and her two guardians. The broad array of ways to define and identify 2e students that we described earlier means that the research field lacks conclusive arguments for one single set of sampling criteria and leaves the sampling methods open for contextual adaption. The sampling in the present study was affected by the increased attention that schools, higher education, and political debate during the last decades have paid to neurodevelopmental disorders in Sweden. The sampling was also inspired by the intricate educational and social complexity surrounding a neurodevelopmental disorder or diagnosis. The student met the inclusion criteria of being classified as 2e since she was (i) considered gifted based on IQ > 120 according to WISC-V and (ii) diagnosed with a neurodevelopmental disorder (ADHD) based on diagnostic criteria. Both (i) and (ii) were established by a psychologist long before our study started. High IQ is considered one out of several commonly used giftedness identifiers [16], and ADHD is considered one out of several described disabilities included in twice exceptionality definitions [13,15,20]. In the terms of Cornoldi et al. [22], the student in our study would be called ‘2e-ADHD’. As noted earlier, the diversity within the group of 2e students implies difficulties in drawing true generalizations about the entire group. Rather, this single-case study aimed to provide rich data about this particular student’s educational situation from the perspective of the participants and thereby give insights that may guide future research in the area.

We conducted a single-case study with emphasis on real-life context and which relies on qualitative interview data and triangulation, that is, “using more than one method or data source during the study of social phenomenon” [37] (p. 468, our translation). According to Merriam [38], most case studies in education are exploratory and incorporate qualitative data to acquire an in-depth understanding of a case by getting close to the research participants and receiving rich information about their interpretations of the educational situation under consideration. Such qualitative and rich data are often collected using interviews with research participants [38]. We conducted in-depth interviews with the three research participants, allowing us to acquire rich data about the same educational situation from different perspectives using triangulation of sources. Our interview data were inductively coded using thematic analysis [39], and later, we performed a consensus interrater reliability check using Stemler’s [40] threshold value as a guideline.

According to Braun and Clarke [39], thematic analysis “provides a flexible and useful research tool” that “can be applied across a range of theoretical and epistemological approaches” (p. 78). We rest this study upon a non-skeptical realist foundation. Non-skeptical realism is adopted by around 80% of the graduated philosophers in two large-scale studies by Bourget and Chalmers [41,42]. The dispute between realists and non-realists concerns “[t]he standard opposition between those who affirm, and those who deny, the real existence of some kind of thing, or some kind of fact or state of affairs” [43] (p. 308). This realist metaphysical theory does not imply any naive epistemological idea about reaching correct worldviews in simple ways. While a non-skeptical epistemology presupposes that it is possible to reach true beliefs about an external world, it does not presuppose that such beliefs are easily reached. Our methodological decisions, such as triangulation between sources and consensus interrater reliability check, are in line with our theoretical assumptions and were made partly to lower the risk of misinterpretations and reach valid conclusions.

Application for ethical vetting, in accordance with the Swedish Act concerning the Ethical Review of Research Involving Humans (Dnr: 2022-01444-01), was sent to the Swedish Ethical Review Authority, which approved this project before the start of data collection. The student and her two guardians gave their informed consent and were given information that they were at all times free to terminate participation without giving any reason and that confidentiality would be respected.
2.2. Data Collection

We conducted several semi-structured interviews with the three research participants about the educational and social situation of the student and sampled the six interviews that had a clear emphasis on present educational challenges and opportunities. The data set in this study thus comprises six data items, in Braun and Clarke’s [39] terms, and contains two interviews with each interviewee. The interviews lasted 20–60 min each and were carried out by two of the researchers. One researcher conducted all interviews with the child and the child’s father, and another conducted all interviews with the child’s mother. All interviews were sound-recorded, and written notes were taken during the interviews. The interviews were based on an interview guide containing questions about the participants’ experiences, approaches, and preferences in relation to the student’s educational environment. In the following, we provide a few examples of interview questions from the interview guides for the student interviews:

- Can you tell me about your ADHD diagnosis?
- Do you think that you are gifted? Why? Why not?
- What do you think of your lessons in the classroom?
- Are there moments when it gets boring for you in school? Give examples. What do you usually do then?
- Are there moments when it gets difficult for you in school? Give examples. What do you usually do then?
- How could school become better for you?

Below we give a few examples of interview questions from the interview guides for the guardian interviews:

- Can you tell me about your child’s disability?
- Can you tell me what you think about your child’s giftedness?
- What do you think of your child’s lessons in the classroom?
- Is there any area/subject in which it works particularly well for your child? What is it that makes it work well?
- Is there any area/subject in which it does not work well for your child? What is it that makes it problematic?
- How could school become better for your child?

Throughout, our interview guides contained open questions to avoid “leading questions that may solicit a desired response, but not necessarily an accurate response” [44] (p. 8). They also contained follow-up questions to allow for the interviewees to elaborate on their responses and thereby “ensure the collection of thick, rich data” [44] (p. 8), which has been recommended for increasing research worker reliability [44].

2.3. Data Processing

The interview data were transcribed by two authors. Three authors then conducted an inductive thematic analysis. According to Braun and Clarke [39], thematic analysis is a method for “identifying, analysing and reporting patterns (themes) within data” (p. 79), which is a way to organize and describe the data set in detail. By ‘inductive’, we mean that we conducted this part of the data processing ‘bottom-up’ or ‘data-driven’, without “trying to fit it into a pre-existing coding frame” [39] (p. 83). We followed Braun and Clarke’s [39] (p. 87) step-by-step guide for inductive thematic analysis, except for step 2 below, which was added by us and is similar to the inductive analysis of interview data by Reznitskaya and Glina [45]. According to Braun and Clarke [39], the analysis “involves a constant moving back and forward between the entire data set, the coded extracts of data that you are analysing, and the analysis of the data that you are producing” (p. 86), a description that reflects our process. Hence, the six steps below only reflect the approximate order during the process because we, for instance, sometimes moved from step 4 to step 5 and then back again to step 4.
1. Familiarizing yourself with your data.
2. Producing a record of idea units/propositions for each transcribed interview.
3. Generating initial codes.
5. Reviewing themes.
6. Defining and naming themes.

In Reznitskaya and Glina [45], the expression ‘idea unit’ (here used in step 2 above) corresponds approximately to a single verb clause. In our data processing, we instead used the word ‘proposition’. The idea is to produce a record of autonomous propositions for all quotes in each interview to allow for subsequent initial coding. In our data, it was common that several propositions were extracted from one quote. An example of this is provided in Table 1.

Table 1. Examples of idea units/propositions for an extract of a transcribed interview with the child.

<table>
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<th>Quote</th>
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<tr>
<td>C: . . . then it can be adapted to how good you are in different subjects and so, i.e., to what extent you are at the same level. Because if I would sit with the guy who disturbs . . . I would have hit him if he teased, because he teases a lot. . . . It would have been, it would have been kind of the best ever, to have it that way instead, because then the teacher does not have to do as much, because then you can ask a friend first, then teachers, and . . . If I ask a friend first—I always do it. The girl sitting next to me, she’s, we’re about the same level, I’m a little bit sharper. But I very often just ask her “Is it like this?” but then she says “But, like, C, it’s just like this” and then I come up with it pretty quickly—it goes much faster. She asks me too. . . .</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Propositions</th>
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<tr>
<td>I think that placement in the classroom should be adapted to how good you are.</td>
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<tr>
<td>I can’t handle sitting with someone who disturbs me.</td>
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<tr>
<td>If I’m sitting with someone who is on the same level as I am, I can ask her about school assignments.</td>
</tr>
<tr>
<td>It makes it easier for the teacher if I sit with someone who is on the same level as I am.</td>
</tr>
<tr>
<td>If I had been sitting with the guy who was disturbing and he had teased, I would have hit him.</td>
</tr>
</tbody>
</table>

In step 2, we acquired hundreds of propositions, some of which were then deleted as they were considered not relevant to our research questions. Overall, 476 propositions remained, which all comprised data for the coding in steps 3–5. Out of the 476 propositions, the two interviews with the student comprised 279 propositions, the two interviews with the father (called Guardian 1 or ‘G1’) comprised 71 propositions, and the two interviews with the mother (called Guardian 2 or ‘G2’) comprised 126 propositions. In our analysis in steps 3–5, we made use of a few coding principles inspired by ideas in Braun and Clarke [39], Bryman [37], Reznitskaya and Glina [45], and Stemler [40]. These principles were that (A) the themes shall exhaust the data set so that there is no relevant data left out from the final thematic structure, (B) the themes shall be distinct (not overlapping), and (C) the main themes shall contain both the child’s and the guardian’s views to allow for triangulation, that is, for “using more than one method or data source during the study of social phenomenon” [37] (p. 468, our translation). Moreover, as emphasized by Lewis [44], we continuously considered “[n]egative cases, discrepant data, or disconfirming evidence” in our “search for data that would disprove the established themes or does not fit into one of the categories” (p. 11). This led to several changes in preliminary versions of the thematic structure.

According to Lewis [44], to fully assess research worker reliability, one must ensure that interviews are interpreted the same by different researchers. In other terms, this regards the assessment of intrarater reliability, which refers to “the level of agreement between a particular set of judges on a particular instrument at a particular time” [40] (p. 1). In our study, after the main phases of the inductive analysis 1–6, one researcher randomly sampled and ordered 30% of the 476 propositions (30% from each of the six interviews) to allow for a consensus intrarater reliability check, similar to the procedures in Author et al. [31] and Reznitskaya and Glina [45]. The researcher not involved in the prior data processing (‘the blind rater’) thereafter used the preliminary thematic structure and coding manual to independently code the 30% data sample. Some overlap between preliminary themes was thereby discovered, which led to a final smaller revision of the thematic structure.
Thereafter, a distinct set of propositions were randomly sampled and ordered (again equaling 30% of the 476 propositions). These new propositions were coded by the blind rater deductively using the coding manual including the final thematic structure, thereby conducting a consensus interrater reliability check [40]. According to Stemler [40], percent agreement is a measure usable when written data are supposed to be sorted into “possible thematic categories” (p. 2) and is “calculated by adding up the number of cases that received the same rating by both judges and dividing that number by the total number of cases rated by the two judges”. In our study, we reached >85% percent agreement and thus exceeded the typical 70% threshold value for percent agreement.

3. Results

Our inductive thematic analysis resulted in the following three main themes: (1) multiplex perspectives on academic outcomes and expectations, (2) the intersection between twice exceptionality and academic work, and (3) information and perceptions about twice exceptionality. Each main theme is divided into three to four subthemes. An overview of all main themes and subthemes is provided in Table 2, which also depicts the coding manual (created during the inductive phase of the data processing) that was later used for deductive coding for interrater reliability control purposes. All main themes contain interview data from the child (C) and both guardians (G1 and G2).

3.1. Multiplex Perspectives on Academic Outcomes and Expectations (1)

This first main theme includes descriptions of the child’s concrete academic outcomes as well as her and her guardians’ expectations of these outcomes. It also includes descriptions of the classmates’ perceptions of and approach to the child’s academic outcomes and how the child conceptualizes the social rules surrounding how you should talk with your classmates about goals, outcomes, and emotional responses related to academic performance. We present the three subthemes in the following order: (1a) the child’s academic outcomes and her expectations of herself, (1b) the guardians’ expectations of the child’s academic outcomes, and (1c) the classmates’ perceptions of the child’s academic outcomes.

3.1.1. The Child’s Academic Outcomes and Her Expectations of Herself (1a)

The child gave many examples of her high academic achievement in school. She spoke about different subjects such as English and Math and argued that she outperforms her classmates in English. She said that she is one out of a few in the class who finishes her school tasks on time. Both the child and G1 described her abilities as being especially good when it comes to verbal areas, but worse in writing. Both the child and G1 talked about the child’s high expectations of her academic outcomes. The child talked about how her goal was to have the highest grades in her school class, and she stated that her grades are very important to her. She also acknowledged that she experiences a lot of satisfaction when she reaches top grades:

C: ... I think it was in the first week [in the new] school that I said “I’ll have an A in math when I finish sixth grade”. She just “No ... I’ve given out two A’s and I’ve been a teacher for 15 years”. And then I said “No, I’m going to have A’s, I’m going to be your third” ... And the day I finish school ... when she gave me my grades ... she said “You will be happy with your grades”. And then I knew that then I had got an A in math. ... And then I was really happy. Then I was happy all over the world.

On the other hand, the child experienced a high level of frustration when the teachers did not deliver clear information about what grade she had received, and she also talked about her extensive disappointment when she did not reach top grades:

C: ... if I will get a D then I will really cry ... I am not exaggerating. I kind of cried yesterday when we got our math tests back because I had 2 errors ... I’m just frustrated that I did badly, so annoyed that I made mistakes ... then I can seem
really grumpy . . . when I get angry with myself. . . . I care quite a lot, because I want to [be able to] get into any high school [that I] want.

Table 2. Overview of all main themes and sub-themes.

<table>
<thead>
<tr>
<th>Number</th>
<th>Theme</th>
<th>Theme Description</th>
<th>Sub-Theme Title</th>
<th>Sub-Theme Description</th>
<th>Source</th>
<th>Propositions</th>
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<tbody>
<tr>
<td>1</td>
<td>Multiplex perspectives on academic outcomes and expectations</td>
<td>Included are descriptions about the child’s concrete academic outcomes and expectations on them. Included are also descriptions about the classmates’ approach to the child’s academic outcomes and her adoptions to the classmates’ approaches.</td>
<td>1a</td>
<td>The child’s academic outcomes and her expectations on herself</td>
<td>Child and guardians</td>
<td>C: When I received a B, I got disappointed with myself. G1: C wants to be good in school.</td>
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<td></td>
<td></td>
<td></td>
<td>1b</td>
<td>The guardians’ expectations on the child’s academic outcomes</td>
<td>Child and guardians</td>
<td>C: Mom wants me to be good. G1: If C does her best in school, then she can later choose what she wants to do in life. G2: C will be able to do what she wants in her life.</td>
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<td></td>
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<td></td>
<td>1c</td>
<td>The classmates’ perceptions about the child’s academic outcomes</td>
<td>Child</td>
<td>C: When I made two mistakes on my math test and got disappointed, then everyone think that I am bragging. C: If one is good in school, then one shall not talk about it with ones classmates.</td>
</tr>
<tr>
<td>2</td>
<td>In the intersection between twice exceptionality and academic work</td>
<td>Included is reasoning about how the child experiences and copes with academic work in school and at home. Included are concrete consequences arising in the intersection between academic work in classroom situations and the child’s characteristics and behavior. Excluded are descriptions of personal traits that are not directly related to academic work. Included are descriptions about teacher approaches, actual or preferred teacher strategies and organisation of the learning environment.</td>
<td>2a</td>
<td>Experiencing and coping with academic work</td>
<td>Child and guardians</td>
<td>C: When it gets boring in school, I talk to the one sitting behind me. C: When the school-work gets too easy, I think too complicated and then it gets wrong. C: When I do homework at home, then I must repeat it many times, because I can’t focus. G1: C puts up her own goals. G2: C gets bored if she has already learnt everything in all lessons.</td>
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<td></td>
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<td></td>
<td>2b</td>
<td>Teachers’ classroom strategies</td>
<td>Child and guardians</td>
<td>C: Many tasks are just to read, respond, and then send the tasks to the teacher. C: If I were to decide, then I would have been allowed to make a verbal completion together with the teacher after I had made my test. G1: The teacher must often re-evaluate the students’ knowledge. G2: In school, the norm is that everything is to be adapted to the group.</td>
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<td></td>
<td>2c</td>
<td>Organisational preconditions for learning in school</td>
<td>Guardians</td>
<td>G1: The school shall seek help from parents even if it is the school that owns the problem, steers, and exerts responsibility for the organisation. G2: The school class has 16 children.</td>
</tr>
</tbody>
</table>
Table 2. Cont.

<table>
<thead>
<tr>
<th>Number</th>
<th>Theme</th>
<th>Theme Description</th>
<th>Sub-Theme Title</th>
<th>Sub-Theme Description</th>
<th>Source</th>
<th>Propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a</td>
<td>Information and perceptions about twice exceptionality</td>
<td>Included is information and direct talk about ADHD diagnoses or giftedness as well as general personal traits or explanations related to characteristics typically associated with ADHD diagnoses (such as hyperactivity, attention difficulties, or impulsivity) or giftedness (such as being high achiever, being smart, thinking a lot, thinking fast, high level of intellectual integrity, or being a besserwisser). Included is also general talk about being different.</td>
<td>The child’s diagnosis and exceptional traits</td>
<td>The child being different, her ADHD diagnosis or giftedness, her general personal traits or explanations related to general characteristics typically associated with ADHD or giftedness, and about how the child and the guardians relate to all this.</td>
<td>Child and guardians</td>
<td>C: When one has ADHD, one is either hyperactive in the brain or one is hyperactive in the body. I am both. C: I get frustrated or sad if something does not work out the way I thought it would. C: I am like everyone else, but I may have difficulties in some situations. G1: I have never experienced unease when it comes to talking about the diagnosis. G2: C constantly wants to learn.</td>
</tr>
<tr>
<td>3b</td>
<td>Peers’ views on twice exceptionality</td>
<td>Classmates’ perceptions about being different, being diagnosed with ADHD, or being gifted, including talk related to characteristics typically associated with ADHD or giftedness.</td>
<td>Peers’ views on twice exceptionality</td>
<td></td>
<td>Child and guardians</td>
<td>C: The classmates don’t believe that I am very smart. C: My classmates think that I must change, but it is pretty difficult. G2: When a person who has difficulties in a group leaves, it gets apparent for the group that the person is different.</td>
</tr>
<tr>
<td>3c</td>
<td>The teachers’ knowledge about twice exceptionality</td>
<td>The teachers’ information and knowledge about, or perceptions of, the child being different, being diagnosed with ADHD, or gifted.</td>
<td>The teachers’ knowledge about twice exceptionality</td>
<td></td>
<td>Child and guardians</td>
<td>C: My tutors are good, because they see no difference between me and the others in the class. C: I find it bad that it is only my tutors who know that I am gifted. G1: Teachers need to see and understand the individual’s difficulties. G2: The teacher read literature to reach a higher level of knowledge about Cs problems.</td>
</tr>
<tr>
<td>3</td>
<td>Normality and exceptionality in a societal perspective</td>
<td>The Swedish society’s or general views on ADHD, giftedness, or being different.</td>
<td>Normality and exceptionality in a societal perspective</td>
<td></td>
<td>Child and guardians</td>
<td>C: I believe that most people find it difficult to feel that one is not normal. G1: In Sweden, it is frowned upon to be good. G2: In Sweden, we sometimes forget that we aren’t allowed to be at the top or to be bad, but that we rather should all be baseline.</td>
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</table>

That the child wanted to be high-achieving in school was underlined also by G1, who stated that the child has “found a motivation on her own; yes I want to be good in school”. However, the child talked about how she had lowered her grades in the seventh school year and considered different explanations for this. G2 indicated that the school focuses too much on test results and that more resources should be devoted to supporting the everyday schoolwork. The child gave examples of antecedents such that her earlier schoolwork has been too easy so that she has lost relevant knowledge or ability to do it properly now, or that she does not have enough concentration or motivation to finish some school tasks: It hasn’t gone well, because . . . it’s been too easy for me because I have thought that it should be harder, but it’s become too easy and then I’ve kind of forgotten, like, how to do it. So, I’ve lowered myself a lot and the teachers notice that, and kind of everyone tells me that when [there are verbal exercises then I can achieve high results] . . . but as soon as it comes to writing, then it becomes very difficult. Then I miss a lot of things that I, because . . . I don’t have the energy to finish . . .
3.1.2. The Guardians’ Expectations of the Child’s Academic Outcomes (1b)

The guardians’ expectations were discussed by the child and both guardians. G2 expressed that she just required her children in general, and thus also the child involved in our study, to be able to graduate from school. G2 argued that it is not important that C outperforms her classmates or gets top grades. G2 rather emphasized that C should only do what is necessary in school, to avoid stress and to rather pay attention to handling her social difficulties. G2 expressed a firm belief that the child will handle school to a satisfactory level. However, from the child’s point of view, G2 is experienced to have high expectations of C’s school performance:

C: . . . My mom is quite a lot like, that I should perform well, because she knows that I can. She knows that if I come home and say “I got a C”, then she knows I’m disappointed . . . then she just says, well, but you have to study more and then . . . I get kind of angry and start crying and then she knows that I am disappointed in myself for not get higher marks . . .

It may appear as if there are contradictions in what has been stated above about G2’s perspective, but the following quote sheds light on a distinction that G2 made between expectations of high academic outcomes and expectations of not being lazy when it comes to academic work: “She doesn’t have to show that she has a thousand A’s in school, or, like: “I have an A in all subjects!” Not for me. However, I do not accept laziness, but that is something completely different”. Both G2 and G1 justified their expectations of C’s academic performance via the importance the outcomes had on her ability to enter higher education. According to G1: “I said . . . “But don’t you know what you want to study in high school?” . . . do the best you can in elementary school because then you can choose what you want . . . if you have done your best then you cannot do any more . . .”

3.1.3. The Classmates’ Perceptions of the Child’s Academic Outcomes (1c)

The child talked about how she experienced her classmates’ responses to her academic performance, how she conceptualized the underlying social rules, and how she frequently broke such rules. The rules could concern that one should not voice one’s academic goals, school grades, or test results when they are vastly beyond the classmates’ and that one should not be disappointed about tiny mistakes on tests when having overall test results much better than others. She stated that one is not allowed to express anything “if one is disappointed if one is good”. She described how her outstanding performance automatically led to classmates’ experiencing her as bragging:

C: . . . If you think of the social [aspects], then I am horse lengths behind my friends. But when it comes to . . . things that you should know . . . then I have no problem. Then I am plenty of horse lengths ahead. And then they can often take me as if I am bragging. That I am a ‘besserwisser’ [know-it-all], I am able to do anything, know everything and so on. Because I’ve always been told that. . . . Not that I’ve thought about it. Because I don’t care (about it). . . . It’s like your classmates, when you have a special talent, then . . . they just think you’re boastful, because you have the abilities/potential.

The child talked about problems that arose when she voiced her emotions about her school grades to her classmates:

C: Once we got our grades at the end of school, we went home. So then I talked to my friends and . . . they thought I was bragging because I said . . . that I was proud that I had got my A’s and my B’s and that I was disappointed that I had gotten that C. I couldn’t do anything about it because everyone had gotten C or lower.

She talked about how she once in school year 6 told her classmates that she became really disappointed with herself because she had read one of the questions in the test sloppily and as a result received a B rather than an A on the test. The classmates thought
that it was “absolutely pathetic” and that it was just a matter of feeling sorry for herself when she became disappointed over making one or two mistakes on an A-question.

3.2. In the Intersection between Twice Exceptionality and Academic Work (2)

In this second main theme (2), the child’s and the guardians’ experiences of and preferences for academic work and the school environment are discussed. The main theme includes reasoning about how the child experiences and copes with academic work in school and while doing homework, and consequences arising in the intersection between academic work in the classroom and the child’s characteristics and behavior. We also give an account of the child’s and guardians’ reasoning about teacher approaches, actual or preferred teacher strategies, and organization of the learning environment on a structural level. The three subthemes are presented in the following order: (2a) experiencing and coping with academic work, (2b) teachers’ classroom strategies, and (2c) organizational preconditions for learning in school.

3.2.1. Experiencing and Coping with Academic Work (2a)

The child gave a complex picture of how she experiences and copes with schoolwork in the classroom and while doing her homework. Often, the school tasks were experienced as too easy for her, resulting in boredom and difficulty concentrating, whereas she described that her classmates were unable to reply correctly to the teachers’ questions. However, the child found writing more difficult than speaking, which was also consistent with comments by G1, who noted that C’s overall fast and easy learning processes made it possible for her to use more time for the more difficult writing process. However, the easy school tasks were experienced as problematic for the child:

I: But is there any time when you feel that it is difficult in school then?
C: That’s when it gets too easy. Then I think it is very difficult. . .
I: Interesting, because I think if it gets too easy . . .
C: It’s almost harder than if it were to be too hard. . . . if it becomes too easy, then I will just think that it is far too complicated and then it will just go wrong. It happens a lot of times that . . . I think it’s too difficult . . . it’s too easy and then it just gets harder so that I kind of won’t come up with anything. . . .
I: What you’re saying is that it’s almost harder when it’s too easy?
C: Yes, I find it harder when it’s too easy than if it’s hard. Thus it’s easier when it’s too hard.

That the child prioritizes more challenging school tasks before easier ones was also visible in her descriptions of individual or group tasks in school, in which she preferred to work alone so that she could adapt the content to a higher level:

C: . . . I’m always the one who has worked alone. Because otherwise I get like this, “But my god how unsmart can one be?” and then I just get so impatient in the end and then I just get angry and grumpy. Because I want it my way . . . and I think most people are like that, too.

The child gave several more examples that revealed her intellectual autonomy and integrity, and G1 added that C works autonomously with her schoolwork without any “scolding” from teachers. Furthermore, G1 stated that C independently puts up her own goals and that she does not need clear goals. G2 described more experiences of the child’s behavior that show clear signs of intellectual autonomy in relation to teachers. According to G2, the child only respects teachers who know their job, does not give in to teachers until she is proven wrong, and forever discredits teachers who do not have the right argumentation.

The child described that when the teachers ask questions, C’s responses are either immediate or very slow. She sometimes experienced high levels of attention and concentration, and sometimes boredom and concentration difficulties. In the following quote, the child gives an example of considerable variations in levels of attention and concentration:
C: . . . It is like this, [the teacher] has not even had time to finish the question and I already have the answer to the question. And it’s kind of like that, either I do it or I don’t do anything at all. Then I don’t even raise my hand either. Because either it’s really fast or I’m slow as syrup . . . I’m not great at holding up my hand and then waiting to get to talk, because then I know that they will ask someone who is not attentive. And then the answer will not come out correctly and I am quite fast, because when they have pointed at someone and they are not fast enough, then I say it. Because I think it takes too long. I’m pretty bad at waiting and things like that . . .

The child described different negative consequences of boredom in school, such as giving up, talking to persons near to her in the classroom, spinning with her chair, walking away to do something else, just sitting on her chair, or talking to the teacher. She acknowledged that, if she does not find the school content “fun”, she sometimes talks or spins with her chair because she has a “bad day”. She also experienced what she called “super focus” or “super attention”, which makes her able to pay full attention for a long time to some school tasks that she finds interesting. This mode was experienced as positive when she was taking tests in school. However, she also stated that, “When I have my super focus turned on, I get really tired afterwards, because I have focused so much”. She exemplified several ways for promoting her concentration decline, such as having interesting school tasks:

C: We have had a trial in the classroom, because it has been in Social Science, and . . . then I was a prosecutor. And then I would get my counsel. Then if [the teacher] has not said that we have this time . . . I might have been sitting there for 2 h and I could still have something to say because I wanted it my way. I want my case, my plaintiff would get money from them and they should get that penalty etc.

Another example of a concentration-promoting method was multitasking in the sense that she held her body busy in some way, such as drawing on her desk:

C: Unfortunately, I start drawing on my bench and it may not be so good. But . . . I can’t sit and draw on paper. It doesn’t work. It’s not the same, so there’s something about kind of just drawing at the same time . . . but not on a piece of paper. Paper doesn’t work. I have to draw on the, like, bench. . . . because otherwise, then a whole lecture might have passed and I have not listened at all. Because I’ve . . . looked straight ahead and just stared. Then I have not been involved at all.

Other similar examples of ways to improve concentration were leaning her chair against the wall or listening and reading at the same time. She argued that she did not learn very much while doing homework at home, but that she at least worked better with it if she focused intensively for a very short period, using “5 focused minutes instead of 20 unfocused”. She preferred to work on her own and particularly to not sit with anyone who bothers or disturbs her, because she would then start behaving physically badly against that person. Walking away to a separate room where she could work alone was described by her as promoting her productivity.

3.2.2. Teachers’ Classroom Strategies (2b)

Several areas that concerned actual and preferred teacher strategies, approaches, and behaviors were discussed by the interviewees, such as having a growth mindset when approaching students, building safe and caring teacher–student relationships, promoting differentiation and acceleration, preventing stigma, and developing firm and fair social rules in the classroom to prevent disturbing behavior.

According to G1, it is important that teachers approach students with the belief that they are open to development:
G1: [Teachers] should never [put] this person in this category, the green category and [believe that this] person will always be in the green category and never move away from it—then you don’t think that people develop. . . . And as a teacher, you have to believe that the students will develop. I guess that’s why the teacher is there.

The child argued that the teachers should attempt to be friendly and not become angry if a student breaks the rules by, for instance, leaving the classroom without the teacher’s permission. G2 also talked about the importance of teachers getting to know their students but added that it is very relevant to set and maintain routines and rules of conduct in the classroom. According to G2, the teachers and the school lack authority over the students and do not to a sufficient degree succeed in teaching the students to show respect in school. G2 stated that, “The school has no authority, and definitely no fostering about respect. They talk a lot about it but they don’t have it, unfortunately”. G2 advocated a few ways to reach a more respectful state in school:

G2: . . . It shouldn’t be so darn fuzzy at school. . . . they should have rules, they should have order and they should understand that they will be punished. If they make a mistake, there should be a consequence. And it should not be a consequence that affects the group, but it should be individualized.

The child gave voice to similar ideas and stated that, “Mom agrees with me about this; me and mom think much alike each other about school”. C argued that the rules of conduct should apply equally to all students and that there should be rewards for not disturbing the classroom. Such rewards were, by the child, expressed in terms of leaving 10 min earlier, which, according to C, would make the disturbing students in the long term understand that they should stop their disturbing behavior. Students not following the rules should, according to the child, immediately be sent out of the classroom, to not disturb the students that follow the rules. According to G2, the very same should apply to her own daughter, something that C also agreed with:

C: . . . if I had been a teacher and I would have had myself as a student, I would have . . . made home calls because sometimes, I can be really damn annoying, that is. . . . I’m not, I wouldn’t say I’m the [most well-behaved student]. So I do this stuff myself and that’s what makes me relatable.

However, the child, at other times, exposes her belief that it is important for teachers to adapt to students with ADHD in the way that they should not always push them to do exactly the same things as other students and sometimes “let them get away with some things” when they cannot handle some particular situations. Both the child and G2 underline the importance of making individual solutions for students based on knowledge about the individual students. G2 argues that the school must, and has the resources to, adapt the education to different students’ needs and knowledge levels. According to the child, it is important that the teacher tries to sense if there is anyone who wants more difficult schoolwork, and then to give it to those who want it. G1 agrees that the school should analyze and adapt education to different student needs:

G1: . . . the range, the outcome, is always from minus [lower academic outcomes] to plus [higher academic outcomes] and then you have to think about what you do with these over here at the edges. And sometimes I’ve experienced that you don’t have a plan for it, but you just work on. The focus is on this group here in the middle. And that’s probably where the problem may lie; that you don’t analyze or try.

G2 described that there have been times when teachers have tried to hold the child back and not let her work in her own pace, while at other times, there have been teachers who have developed their competencies to provide her with more advanced school tasks. According to G2, the teachers have lately made appropriate adaptions:
G2: She has always received support and help to move forward from the teachers now in recent years. [L1] here in [X] has been fantastic, and also [L2] so . . . then she has received support and help at the level she is at, and then . . . [L1] may feel that now she is letting her go too far—"I have to catch up here myself"—[L1] maybe put her here in a teaching role and said: “Why can’t you join [another child] today because she has a little problem with this and this”? Yes, but then C may have gone, sat like that and worked with [the other child] and explained to that child. So that then [L1] has to find another role for her.

Whereas G2 prefers several forms of acceleration or enrichment options, as can be noted in the quote above, G2 is very clear that she does not want her daughter to be pointed out as best in class or an exemplary student. G2 prefers that the child stays in class, that she does not have to experience more stress or pressure than necessary, and that teachers’ emphasis on cutting-edge competencies can wait until she reaches upper secondary school. According to G2, it is important to avoid stigmatization, and that there should thus not be too much fuzz around her so that “she shall, like, get a large hat that reads ‘I have ADHD’”. However, G1 argued that the teachers should try to develop a safe atmosphere that induces a belief in the teachers’ competencies in handling C’s disability and that prevents taboos surrounding the diagnosis.

3.2.3. Organizational Preconditions for Learning in School (2c)

The child and the guardians discussed organizational preconditions for a positive learning environment in school, such as having more than one teacher per school class, having small school classes, and having a calming physical environment. Most of these factors were described as being better now that she had changed to another school, but when it came to the teacher ratio, both the child and G2 stated that they had still only one teacher per school class. The child expressed that she would have preferred to have more than one teacher, to enable verbal tests rather than written tests:

C: But it will be difficult, it’s seventh grade . . . It takes extra time for the teacher. After all, we only have one teacher. . . . It is not possible, because then the teacher has to leave the classroom with the student. Because I can’t sit in there [in the classroom], and then there will be chaos in there [in the classroom].

However, there were few children in the class, and this was the main reason for the choice of school, according to G2, “So, why we chose this school is because it has few students. I think that everyone benefits from that”. G2 expressed that it would work better when going to the lunchroom and make it easier to maintain order in the school with fewer children. According to G2:

G2: . . . here at [the school] it works largely because you have small classes, you have small rooms for group work and you have a small schoolyard. . . . The school building has different floors; maybe that makes it calmer in the corridors? I don't know. In some miraculous way they have succeeded, at least.

Other physical factors that were considered positive for the learning environment were that the school had a small schoolyard, several building levels that were believed to cause calm in the corridors, and furniture that was sound-absorbing or construed to not make noise.

3.3. Information and Perceptions about Twice Exceptionality (3)

The third main theme (3) includes the interviewees’ reasoning about being different, ADHD diagnoses, or giftedness, as well as general personal traits or explanations related to characteristics typically associated with ADHD diagnoses or giftedness. It contains four subthemes which are presented in the following order: (3a) the child’s diagnosis and exceptional traits, (3b) peers’ views on twice exceptionality, (3c) the teachers’ knowledge about twice exceptionality, and (3d) normality and exceptionality in a societal perspective.
3.3.1. The Child’s Diagnosis and Exceptional Traits (3a)

The child’s ADHD diagnosis and different traits and behaviors commonly associated with giftedness and talent were discussed by the child and her guardians from a wide range of perspectives. This subtheme includes the interviewees’ reasoning about how to understand and approach the diagnosis and to be normal or abnormal and about the child’s intellectual integrity, fast learning skills, boredom, hyperactivity, impulsivity, acting out behavior, and emotional and cognitive instability.

G1 talked about the scientific basis of the ADHD diagnosis and that he never experienced any unease when talking about the diagnosis. The child noted that it often happens that others do not understand her because of her ADHD and that she usually answers and talks about the diagnosis if someone asks about it. The interviewees’ understanding of the diagnosis has varied over time, and G1 expressed that it was important to receive the information that not all people with an ADHD diagnosis are exactly the same:

G1: But that’s what one forgot to tell about in the beginning, it’s not pluses and minuses or 1–100, but there is so much more that comes into play. And that’s exactly what this psychologist was so amazingly good at explaining. To, like, picture how the world for a person with ADHD might be and how many spectrums there are ... and it is also good for those who have a diagnosis to understand, just because there are two of us in my class who have ADHD does not mean that we have the same problems. We can have completely different problems.

The child described both positive and negative consequences stemming from her ADHD. She said that she believes that it makes her good at many things, but that there have also been plenty of problems, especially when she was younger. She considered her disability to be comparable to a sickness that it is difficult to do something about: “It’s quite difficult [to change behavior] because it’s something that I am, it’s a sickness, or how should I put it, that I have and then you can’t just make it magically go away; just hide it in your back pocket”.

When it came to the combination of giftedness and a neurodevelopmental disorder, the expressions “twice exceptional” and “2e” were unknown to the child, but she spoke about both her “intelligence” and her “ADHD”, and G1 asserted that C knew about both her giftedness and her ADHD diagnosis. G2 stated that the combination of high intelligence and ADHD becomes demanding. Overall, the interviewees talked more about ADHD than giftedness, and the child was more prone to attribute explanatory power to ADHD than to giftedness. However, there were a few exceptions to this, and several traits typically associated with giftedness were brought forward by the interviewees. G2 talked about C’s intellectual autonomy and integrity, both guardians emphasized that she is a fast learner, and the child talked about her extensive knowledge in comparison with others. According to G2, the child is highly intelligent, and together with social difficulties, this was believed to cause social problems: “... Then you can imagine that when she sits there, going: “Ha! You answered wrong! Ha! You did this! Ha! You did that!” And she becomes an annoying ...” The child argued that her intelligence could cause internal harm, too: “… It can be quite uncomfortable and kind of feel very ... almost so that you are a little ashamed that you are smarter than everyone else...”. The combination of giftedness and ADHD was considered problematic in some ways by the child:

I: ... If you can tell me what you think about intelligence, or your particular talent ... How does it affect you?

C: ... if I would not have had my ADHD but just a higher intelligence than everyone else, then I would be able to avoid situations where someone comes up to me and says something that according to me is not ... If you are a little smart, you know that you can do better than others, then I could have avoided it. Then they could have believed whatever they believe and so on, but now if someone says something that is incorrect, then ... I cannot stop myself from commenting on it. ...
Both G2 and the child talked about C’s social difficulties, and G2 emphasized the importance of learning to not point out others’ mistakes in a rude manner. Moreover, C talked about how she is impulsive, easily gets bored, and has poor patience, which make her unwilling to wait for her turn:

C: . . . because I am gifted and have ADHD, my brain spins so fast all the time . . . . . . . I have always had problems, one always raises one’s hand, but . . . I have never become good at that, so I have always just spoken immediately, because I don’t have the energy to wait for the others since it takes a while . . .

The child described a lack of internal emotional understanding and emotional control. She said that, “. . . it is due to my ADHD also, that I am impulsive”. According to C, she sometimes just feels a strong urge to do something and immediately follows that urge. For instance:

C: . . . then I only get impulses, like: now I have to do this . . . and I don’t even have time to think about it, I’ve already done it . . . I have to say this, no one asks, no one even agrees with what I’m talking about. And so, I just say it. It’s very often like that, I say things straight out.

The child ascribes this impulsivity to her ADHD and also asserts that ADHD affects her so that she becomes a ‘besserwisser’/‘know-it-all’: “I’m a ‘besserwisser, but it’s just . . . I take my impulses very quickly . . . I’m impulse-driven . . . But it’s also because of my ADHD that I’m impulsive”. The child talked about how her impulsivity and lack of emotional control make her hurt her friends when she becomes angry:

C: Do first, think later. Say first, think later. . . . If I get angry, I can “conjure up” 1000 sentences about why this person should hate themselves. It can go on indefinitely . . . when my boss in the brain takes over. It’s kind of one of my best friends, but it’s my worst enemy too. I can say so many things that I know this person takes offense too, and if this person has told me that something is a pain for them, then . . . Once I get into an arguing state and just raise and raise my voice to be heard—that’s when this boss kind of dies. He takes a little nap and then I just conjure up all the words I know and everything I can about this person that I know can make them sad. And—they haven’t quite grasped that yet—I don’t mean anything when I’m angry, and then [afterwards] I can get really angry with myself, too.

However, the child also argued that she is, in fact, pretty good at keeping her emotions inside, but she also stated that when it gets too much, it becomes like an unforeseen emotional “explosion”’. These kinds of extreme variations are visible also in the child’s ability to focus and concentrate. She names her extreme concentration skill “super focus”, which she said can be followed by a high level of tiredness. Variations in attention were also described by the child as follows “. . . either I absolutely can’t focus on anything, or . . . I don’t even hear what anyone is saying. But it’s really either or. There is no in-between”. She said that it is her weakness that she “never knows what mood her brain is in”. The child’s brain was described by herself to be hyperactive, which she explained with references to both her ADHD and giftedness. She found both her brain and her body extremely active, which she thought made her different from others: “. . . either you’re hyperactive in the head, in the brain that is, or you’re hyperactive in the body. But I wouldn’t say I’m either/or, I’m rather both hyperactive in my body and in my head”. Even though the child argued that there were differences between her and her classmates, such as the above, she also said that she is very much similar to others, just that she has other difficulties. According to C, she did not want to feel strange and abnormal:

. . . One doesn’t want to feel this different. . . like: “now [C] must be special” . . .

At least I’ve found that really hard. That . . . everyone else has been able to think that they are like everyone else. That is, that one is different from everyone else. That one is not normal . . . I think most people find that quite difficult.
According to G2, her child is special and should be allowed to be different, but she can now focus mainly on developing social skills and “just be like everyone else and learning the social ‘game’”. G2 also concluded, based on how the society and school context works, that her task as a parent becomes to teach her kids that they shall not be too good in school.

3.3.2. Peers’ Views on Twice Exceptionality (3b)

The child gave an account of how she thinks that others understand her and her diagnosis. According to C, her classmates perceive her as a ‘besserwisser’/‘know-it-all’ who knows everything, and she tends to be considered emotionally sturdy by others, which is evident in the following quote:

C: . . . many people just think . . . that I’m so patient, that I don’t care . . . but then, even if it’s not meant for me, I can get angry out of nowhere. I don’t even know why I get angry . . . that’s just because I’ve been so angry, annoyed, for quite some time and then I just get like that.

She talked about how she feels misunderstood by her classmates, who she said believe she does a lot of things on purpose. According to the child, the classmates do not understand what ADHD is, and especially not that it may be combined with being smart:

I: . . . are there times when . . . others around you, don’t understand you, and you think that this is because of your ADHD?
C: Yes, that’s kind of almost every day. . . . Not many people in my class now understand that certain things I do happen because of my ADHD. . . . hardly anyone really knows in there [the classroom] what it [ADHD] is, too. Everyone then thinks: “Ah you have ADHD, then you can’t sit still and . . . You’re not that smart”. Because they think I’m so smart.

Another example where the child talked about how her classmates do not understand her behavior as a result of lacking knowledge about ADHD and giftedness is the following: “. . . others think, what the hell is she doing? Many who do not understand, many think that I am just stupid, or . . . that I’m doing something wrong”. The child said that she has only described her behavior in more detail to her best friend and that this resulted in it being much easier for her friend to understand why C behaves the way she does.

3.3.3. The Teachers’ Knowledge about Twice Exceptionality (3c)

The interviewees discussed the teachers’ present knowledge about giftedness and ADHD and that there is a need for teachers, in general, to increase their knowledge in these areas to be able to meet individual students properly and to orchestrate education effectively. According to the child, only the so-called “class mentors” (Swedish: “mentorer”—i.e., two teachers with special responsibility for the class, beyond teaching, which, for instance, includes administrative and social responsibility, keeping extra contact with the students and their guardians, and so on—perhaps comparable to what is sometimes called “form teachers” or “form tutors”) know about the child’s giftedness, and the child described how she had informed one of her mentors about this: “then I told him I’m not low-intelligent: ‘I’m a notch higher than the normal level,’ and he said that he understood that, because he’d noticed . . . because I was able . . .” The child talked about the class mentors knowing that she learned new things easily and that the teachers had noticed that she listens well (even if it sometimes seems as if she is not listening). However, she experienced it negatively that only the class mentors and no other teachers knew about her giftedness: “. . . No teacher except my mentors knows about it [i.e., the giftedness] and I think that’s pretty bad behavior from a school”.

According to G1, the teachers can take part in the diagnostic information if they want, in order to make the best out of the situation. The child emphasized that the knowledge about her preconditions helps the class mentors to provide appropriate support: “. . . she is . . . really nice to me and just tries. She knows that I am able, and she knows that I get stuck . . .” G2 talked about how both G2 and C had informed the teachers about her ADHD
diagnosis and giftedness. G2 also explained teachers who then started to read to increase their own knowledge in relevant areas to be able to provide suitable educational provisions for C. According to G1, some teachers know how to handle the situation in a good way, and they do not always need to have some special title to be role models. G1 argued that teachers should be open and interested in analyzing different student needs and strengths, to be able to meet the students’ needs with their teaching.

3.3.4. Normality and Exceptionality in a Societal Perspective (3d)

The guardians discussed societal perspectives on being outstanding and abnormal. G1 argued that it is considered bad to be good in Sweden and contrasted this with another attitude said to be prevalent in the US:

G1: . . . there has been a discussion in the media about . . . “Shall the school adapt to the individual or to the broad middle lane?” And it is like that within everything, really, in our society. . . . In Sweden, it is frowned upon to be good, I would like to argue, at least in comparison with other countries, the US, where it is always about the result and nothing else.

G2 agreed with this and stated that Swedes: “. . . aren’t allowed to be at the top, and we aren’t allowed to be bad, but we should all be, like, baseline . . .” Similarly, the child expressed that she believes that most people find it hard to feel that one is not normal.

4. Discussion

4.1. Focus on Strengths, Not Only Weaknesses

As noted in the background, several researchers suggest that an effective educational approach towards 2e students should take into consideration their strengths and special abilities, not only their weaknesses and difficulties (e.g., [32,34,36]). Several studies have also found that this is oftentimes not the case, but that schools instead tend to focus on the weaknesses or disabilities of 2e students, such as difficulties associated with an ADHD diagnosis, etc. (e.g., [6,36]). The result of the present study is interesting in relation to this.

Firstly, it can be noted that the experiences of both the guardians and the child in our case study are in line with prior studies (e.g., [32,34]) that have suggested that schools tend to focus less on the strengths and abilities of 2e students. Although there are some examples in our study of descriptions of situations where the school has understood particular strengths, there are very few examples of how the school has made systematic endeavors to base an educational strategy on her special strengths, abilities, and interests. If it indeed was a fact that only two of her teachers even knew about her giftedness, as stated by the child herself, it would seem impossible that there would be any far-reaching educational attempts to provide her with an educational environment adapted to her giftedness. It might be, of course, that more teachers know about it than what the child herself is aware of. However, if that was the case, and they did not inform her that they were aware of her situation, it can be questioned whether there were any systematic adaptations to meet her needs. A rather solid conclusion, therefore, is that this study adds to the body of research suggesting a lack of attention from schools to the strengths and abilities of 2e students relating to their giftedness. This is in line with findings discussed by, for instance, Dare and Nowicki [6] and Gierczynski and Hornby [32].

Secondly, it can be especially noted that the child herself also desires and requests that her school should do more in this respect. She explicitly stated that she wishes that more of her teachers knew about her giftedness, and she talked about how the school could be better at catering to her strengths. This echoes suggestions made by prior research (e.g., [32]), which also highlights that 2e students are oftentimes good at identifying the educational needs of both themselves and other 2e students, which has also been reported in prior studies (e.g., [32]). The guardians also made some statements in this general direction. For example, G2 described how her new school is now supporting the child better than her last school, and giving her special tasks like helping other children, which G2 seems to regard as a positive thing.
On the other hand, both the child and G2 expressed sentiments that it is good not to be seen as different from what is considered normal, and this might speak heavily against informing other people, both teachers and students, about her giftedness. If the social environment is not ready to meet such differences in a positive and supporting way, it is not very remarkable that exceptional students keep to themselves. We return to this matter later.

The general tendency of the data from the present study suggests that the participants in this study—in particular the child herself—align with the suggestions made by many researchers, that an effective and fair educational strategy toward 2e students ought to be based upon, and center around, an informed picture of the students’ giftedness, strengths, and abilities.

4.2. The Need for More Knowledge

In order to focus on strengths and not only weaknesses in the educational provision, parents likely play an important role, as advocates for their child’s rights and needs [cf. 28]. To be able to accomplish this, parents “need the resources [necessary] to fulfill this role” [6], (p. 216), which includes access to research specifically about 2e students. Since there is a lack of research in Sweden about 2e students, as well as a general lack of knowledge about, and attention and focus spent on talking and thinking about, twice exceptionality in the public and professional educational conversation, it is not surprising that the guardians focus on their child’s disability rather than their giftedness.

Thus, in order for teachers and educators, as well as parents, to adequately support 2e students, there may be a need for effective practices for the identification of 2e students (cf. [20]), and there is a need for more studies on how to provide proper support. In order for any of these things to happen effectively and reliably, there is also a need for adequate definitions of twice exceptionality. As of now, there is a lack of both theoretical and empirical research dedicated to 2e students, not the least in the Swedish context.

On the other hand, according to the Swedish Education Act [10], teachers shall identify and provide support to meet students’ needs, regardless of whether or not there are any diagnoses or special identifications involved. Thus, it might be argued that there is, after all, no need to explicitly identify a certain student as 2e, as long as the specific needs of that student are being identified and met. That said, one might think that the likelihood that a specific student will have their needs identified and met without explicit use of twice exceptionality terminology is less likely. In particular, prior research suggests that the strengths and giftedness of a student are especially less likely to be given as much attention if no explicit identification of twice exceptionality is undertaken.

4.3. Peers

Some interesting differences between the results of the present study and some of the prior research on 2e students and their relationships with peers are of interest to discuss further. As noted in the background, prior research has found that peers of 2e students recognize both the strengths and weaknesses of their 2e friends [25]. Moreover, peers appreciate and admire these strengths displayed by their 2e friends, and they even express that they take pride in their 2e friends’ strengths, successes, and special abilities [25].

This is a description that differs from the picture that arises from the data in the present study. The child interviewed in this study, on the contrary, expressed the feeling that her peers perhaps do not appropriately recognize her strengths, but more importantly, that they are not particularly supportive, happy, or admiring toward her in this regard. For example, she said that she feels that being gifted or intelligent is not looked favorably upon by her peers. In fact, all our participants state that it is frowned upon to do well in school in Sweden or to be highly able.

A few interpretations of this picture are possible. Firstly, it might be that the child is right that there is a general tendency by her peers, and students in Sweden in general, to frown upon giftedness and to not express admiration toward gifted students or pride in the
high abilities and achievements of one’s gifted peers and friends. There is, unfortunately, other evidence that supports such a view.

Secondly, it might be that the situation in part results from a lack of knowledge among her peers about her situation and condition, caused (at least in part) by a lack of information. She stated herself that she does not speak much to her peers about her giftedness, and, moreover, that only two of her teachers know about it. From this information, we may assume that the information given to others than those most closely concerned is quite limited. But while this might be part of an explanation of the alleged unsupportiveness of her peers, it raises further questions. Why has she not communicated more openly to her peers and teachers about her giftedness? Perhaps even more importantly, why have her teachers not communicated more clearly with both their colleagues and the students in her class? It is not difficult to assume that this is because there are underlying norms and traditions that still make giftedness difficult to handle topic within the Swedish educational domain.

Thirdly, it might be that her peers actually do not mean to frown upon her academic successes and her strengths and special abilities, contrary to what she seems to believe. It is possible that her peers, in telling her off when she is sad about a few mistakes on a test, actually mean to encourage her for having done well. Maybe they meant to shift her focus from the negative to the positive aspects, wanting to help her see that she should actually be quite happy about her good result. This might be an attempt at being supportive, and might also be a way of expressing admiration, as if they were trying to say “you shouldn’t be sad about your performance. I’m not sad about your performance, in fact I think you did great. I would be thrilled to have as good a test result as you did. Well done! Be proud of yourself!” It should be noted, of course, that this is different from what she recalls them saying. However, it might be that they did not manage to express themselves perfectly clearly or that she did not manage to perfectly do them justice in her recollection of the events, perhaps in part due to the fact that she has formed the opinion that her peers are not supportive of her.

While our data do not provide enough ground to conclusively settle these matters, the mere possibility that one, or both, of the first alleged explanations are valid is reason enough to be concerned. It is possible that the experiences that the student in this case study is giving voice to are due to systematic shortcomings in the Swedish educational system with regard to supporting 2e students. More research is needed in order both to find out whether there are systematic errors relating to how 2e students are treated in school and, if there are, then how to effectively start correcting these errors in order for 2e students to receive the equal opportunities that they have been promised by the educational system.

4.4. Limitations and Prospects

The study design allowed us to acquire an in-depth understanding of the interviewees’ experiences and reasoning, in accordance with Merriam [38]. However, our design and small sample limits external validity. As an exploratory single-case study, we aimed to provide data that may be used to formulate new hypotheses about the educational situation, challenges, and opportunities for a group of students that have not previously been devoted many research resources in Sweden. Through our findings, we pave the way for further qualitative research in the area to determine if similar results are found for other 2e students nationally and for further large-scale research to test hypotheses built on the results of our study. Swedish experimental research to test the effectiveness of some of the suggested teacher strategies would be of educational value for both teachers and 2e students. Retrospective studies that illuminate 2e students’ educational journeys from early childhood education and onward would also be of value, as would studies of 2e children in other domains than the educational, to reach a holistic understanding of the group. However, as earlier noted, such a holistic approach is complicated by the diversity of, for instance, the disabilities [6,13], and more national research is therefore needed with samples based on different preconditions.

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References
6. Dare, L.; Nowicki, E.A. Twice-Exceptionality: Parents’ Perspectives on 2e Identification. Roeper Rev. 2015, 37, 208–218. [CrossRef]

22. Cornoldi, C.; Giofrè, D.; Toffalini, E. Cognitive characteristics of intellectually gifted children with a diagnosis of ADHD. Intelligence 2023, 97, 101736. [CrossRef]


26. Wang, C.W.; Neihart, M. Academic Self-Concept and Academic Self-Efficacy: Self-Beliefs Enable Academic Achievement of Twice-Exceptional Students. Roeper Rev. 2015, 37, 63–73. [CrossRef]


33. Edström, K.; Gardelli, V.; Backman, Y. Inclusion as Participation: Mapping the participation model with four different levels of inclusive education. Int. J. Incl. Educ. 2022. [CrossRef]


44. Lewis, J. Redefining Qualitative Methods: Believability in the Fifth Moment. Int. J. Qual. Methods 2009, 8, 1–14. [CrossRef]