Louise Stroud
Elizabeth Green
(Editors)

Griffiths III – A Case Study Book for Practitioners

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About the Editors

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Foreword

While we try to teach our children all about life,
our children teach us what life is all about.

– Angela Schwindt

Illustrations by Sarah Stroud

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The publication of *Griffiths III – A Case Study Book for Practitioners* in 2022 as the world begins to emerge from the ravages of the Covid-19 pandemic could not be timelier. Many lessons have and will be learnt from the pandemic, but the precious lesson that children need both play and school to flourish must never be forgotten. While children were mercifully far less impacted by the virus itself, we have learnt hard lessons about how children can be affected when school is delivered online, when play and sport are no longer possible, when meeting up with friends is prohibited, and when routine and life as it is known stop.

Our children have shown remarkable resilience and courage in the last two years, but we know that not all have come through unscathed. Children from the most socially disadvantaged communities and children with health and developmental problems have paid a heavy price, and so it is these groups that need specific focus, care, and attention as we recover from the pandemic.

The problems that face us can feel daunting. However, many of the solutions we need come very simply from listening to the children and families we serve. Children and young people have been articulate and engaged – both in describing the problems as they see them, but then also crucially in showing us where the solutions lie. The children and young people who work with the Royal College of Paediatrics and Child Health, RCPCH&Us, have been very clear about what they believe mental health services should look like, how virtual consultations should be set up, and crucially how they want to be central to service planning and development. Fundamentally, our children are telling us they have a voice, and they want to be listened to and valued.

Louise Stroud and Elizabeth Green have done a masterful job of placing the child at the center of this book, and the voice of children and their families ring through the pages. This is not a simple training manual on how to undertake the Griffiths III, a standardized test. This book is so much more: It makes the clear case for treating each child and each family as a unique entity. It consistently emphasizes why it is crucial to adapt and modify how the test is undertaken and interpreted to the context of the child in the moment. Stroud and Green achieve what every pediatrician hopes to achieve in each clinical encounter – the child is considered in the context of their health, family, education, social situation, and so much more. Crucially, they make the case for acknowledging and celebrating diversity – diversity of culture, parenting, socio-economic background, and more.

I commend this book to all who work in the field of child development and more widely with children who are not following a typical developmental pathway. Hearing the voice of the child in all we do and underpinning our work with compassion and kindness should be fundamental. This book will help you achieve that.

Camilla Kingdon, MA MBChB FRCPCH
Consultant Neonatologist, Guy's and St Thomas' NHS Foundation Trust
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Preface

Louise Stroud and Elizabeth Green

Oh, the Places You'll Go! is the last children's book Dr. Seuss authored (Geisel, 1990), and it is his guide to the journey of life. It is a brief story that reminds us that we can be the things we want to be, with a little bit of work and will power. Without ignoring the basic fact of life that everything does not always go ideally, the book encourages us to get out there and make things happen. According to Dr. Seuss, waiting for something to happen is the worst choice that anyone can make; for nothing can be gained, if nothing is risked. Similarly, Pierre van der Merwe in his book *The Adventures of Auggy (Book Two): The Magic Lily Pad* tells the story of Auggy, a very popular little froggy, who lived in a pond. Legend had it that if Auggy, or anyone for that matter, saw the magic lily-pad on the pond and made a wish, their wish would come true. The magic lily-pad got its name from the reflection of the sun and moon on the pond which became like golden and silver lily-pads, as the sun and moon moved across the pond. The message behind the story of Auggy and the magic lily-pad is that there is still magic even when everything is not what one would want or think it to be (Babb & van der Merwe, 1997). These two children's stories provide a lovely start to this Griffiths III Case Study Book for Practitioners. Their messages of courage, will power, risk, and believing in magic are most appropriate not only for the practitioner with an interest in children and their development, but also for the children they serve.

This Case Book is a professional reference book. Although aimed particularly at Griffiths III practitioners, it will also be of interest to a wide range of developmental practitioners. The approach taken in this book is to use individual case studies to demonstrate how Griffiths III can be used in a comprehensive assessment of a child's development, of their strengths and their needs. It aims to offer practitioners practical examples of the application of aspects of Griffiths III beyond simple first-level training, to administer test items correctly. It also meets the need to clarify how the test may be used with a nontypical population.

It must be said that compiling this Case Book did not involve a description or story that fell easily and smoothly into sequence. It was a process that was garnered from many sources and from many people. Some of the Case Book comes in the form of fragments from professional men and women who have looked on developing children, with a unique and unrelenting eye. It comes from men and women who carry the germ of knowledge, implanted somewhere deeply in their beings, a place where a curious, natural rhythm exists and a kind of magic. It describes the interplay between universal and unique contexts in shaping child developmental assessment, specifically using Griffiths III. Ruth Griffiths described this as the sixth sense (Griffiths, 1968).

In this Case Book for Practitioners, the Griffiths Scales of Child Development, 3rd edition, or Griffiths III as it is known, will be described. Griffiths III is a test which is instrumental in determining whether a child is developing age appropriately, or whether a general or specific developmental difficulty is indicated. Griffiths III is used in the assessment of all children but particularly in the assessment of children with disabilities and the creation of appropriate intervention plans. Practitioners need to understand the test to formulate it

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successfully with a child with disability. To this end they have asked for a practical book with examples to deepen their understanding of the test and clarify how the test may be used with a nontypical population.

The assessment of development involves a comprehensive investigation of a child's abilities, including motor, social, and cognitive abilities, by direct observation, testing, and reports from caregivers. The rapidly shifting nature of children's development poses problems for the assessment of young children. Of the various methods for assessing child development, Griffiths III is among those that have been accorded world-wide recognition, especially by pediatricians and psychologists. It is not simply a screening test, for it enables a thorough, holistic diagnosis through analysis of the developmental profile. Through periodic reexaminations of children, we can bring to light developmental trends and establish developmental baselines.

In the past, the *working child* toiled in the fields, and later, in the factories of the Industrial Revolution. The 20th century saw the rise of the *free-range child,* and more recently we have experienced the emergence of the age of the *managed child* with the *helicopter parent* hovering overhead trying to control things. Today, more specifically, we face the challenge of finding a new recipe for assessment of children growing up in the information age. However, regardless of the period of time in which they find themselves, children thrive when they have time and space to breathe, to chill and get bored sometimes, to relax, to take risks and make mistakes, to dream and have fun on their own terms, even to fail. Their appetite for change leads them to be curious about the world about them. They love to play. They need to play. It connects them to the real world – their real world.

Nell and Drew (2013) state that children learn to make their own decisions when they play and experience freedom in making those choices. They begin to see connections between choice and the consequences or results of that choice, this inspires creative thinking and delight. Because children eventually find it more important to be part of play with their friends than to satisfy their own wants and needs at that moment, children learn self-control. And self-control has been shown to lead to success in later years, especially in today's information age, where distractions are part of daily life. Play provides children with opportunities to develop flexibility in their thinking and decision making, which is a vital life skill.

Play is a science and an essential ingredient in optimal child development. It has been described as a lighting up of the brain. The Griffiths Scales are not play-based scales but have been structured since Ruth Griffiths' first publication to include the types of play children enjoy at different stages of their development. Because children are intrinsically motivated to enjoy play, observing a child performing a structured activity in a play context offers much more information about the child's strengths and any barriers to development than a simple pass/fail.

All children should have equal access to play, which is fundamental to childhood, and yet it has been found that disabled children have significantly fewer opportunities to access, and more barriers to, play settings and activities than their nondisabled peers. According to Sense's website resource *Making Play Inclusive: A Toolkit for Play Settings* (https://www.sense.org.uk/get-support/support-for-children/play-toolkits/), the key principles for inclusive play include the following:

- Equality does not mean treating everyone the same; it is about making the adjustments that enable all children to take part.

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- Every child is unique. It is important to take the time to get to know each child, prepare for and understand their needs, and know where to go for further advice.
- Give children time to respond, explore, and play.
- A can-do attitude is really important – always focus on what the child can do and understand what achievement means for each child.
- Manage risk effectively; don't let it get in the way of play.
- Listen, discuss, plan, and consult with parents.
- Where possible, treatments and therapeutic interventions should be delivered through play.

As practitioners with an interest in child development, it is necessary for us to establish children's developmental baselines as well as their individual barriers to development. For example, in the past this need led the developmental psychologist Plooij to speak of *regression periods*, the child neuropsychologist Vygotsky to highlight the importance of *zones of proximal development*, the cognitive psychologist Piaget to suggest that cognitive development progresses as change happens in the child's knowledge systems, and the child psychologist Ruth Griffiths to create the Griffiths Scales of Child Development.

Dr. Ruth Florence Griffiths was born on September 2, 1895. She experienced an isolated and troubled childhood (which she seemed to remember forever after). Dr. Brian Burne records that it was perhaps these early experiences that laid the roots for her later meticulous observation of young children, her love for them, and her pleasure in observing their personalities unfold and blossom. J. C. Flugel also referred to Griffith's observation of the free behavior of children, her rigorous control of experimental conditions, and her ingenuity, tact, and perseverance, as being full of promise for the future. How right he was, as Griffiths went on to design and create the Griffiths Scales which were published in 1954.

When the Griffiths Scales were first introduced, the psychometric conceptions of intelligence were emerging and were to influence psychometric measurement for the next three generations. These narrow conceptions included verbal, visual-spatial, and mathematical abilities. The Griffiths Scales brought with them an innovative system for developmental assessment, as Griffiths was keenly aware of the importance of interactions between the various avenues of learning. She advocated a broad-based approach to understanding development (i.e., the processes and rates at which growth and maturation of a child's attributes and abilities take place) and the concept of the observation of children in play. She was aware of the importance of social and emotional developmental factors and the interplay between these and development.

This Case Book puts the perspective of the child at the center and considers their voices. It considers their identities and developmental stages. It embraces their agency through promoting advocacy. It does not distrust or discount other voices, such as those of adult experts, but rather seeks to fulfill the child's need to be heard within the considerations of barriers that may challenge the fulfillment of this right. This is a deliberate and reflexive account of the child's story within a context of diversity. It is an acknowledgement of the agency of children and the insertion of their voices into their stories, while being guided by their accounts of their lives, and the accounts of their lives by others. In essence, this is an insider–outsider approach, which makes for a child-centric Case Book for Practitioners using Griffiths III. It aims to assist practitioners to better track and monitor development, plan and measure the impact of intervention, and inform decisions about management and placement of the child. It hopes to aid in the creation of a community of practice among

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Griffiths III users worldwide. A place where the voices of the children we assess are listened to and heard. The Chinese symbol for "listen" captures this most aptly, as it is made up of four parts – namely, the ears, the eyes, the heart, and undivided attention. This is reflected visually below:

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Chapter 1

An Introduction to the Griffiths III Case Study Book

Louise Stroud and Elizabeth Green

Why a Griffiths III Case Study Book?

Griffiths III is a standardized test, but every child is unique. Any adaptations must be personal to each child. It is necessary to look at patterns of behavior, skills, and needs, and how the *avenues of learning* (Griffiths, 1954) fulfill current biopsychosocial-environmental perspectives within the disability field.

Purpose of the Case Study Book

The aim of this book is to offer practitioners practical examples of the application of aspects of Griffiths III beyond simple first-level training, to administer test items correctly. It will also meet the need for publishers to clarify how the test may be used with a nontypical population. Furthermore, amplifying children's voices, advocating for their protection and agency, and representing them in a way that is fair and eliminates injustices are all parts of the important groundwork necessary for fine-tuning and ensuring the rights of children in every respect.

Multiprofessional and Multiprocess Context of the Case Study Book

Most children who are assessed with Griffiths III have a number of people on their "team." This includes the child's family and often a multiprofessional team from education and health services. Their perspectives on the child's developmental strengths and needs are a vital part of the assessment. Their input into what they need from the assessment is also important both to consider the implications of the assessment for the child, family, and their wider environment, and to design a useful intervention plan.

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Four Conceptual Frameworks

This book has four underlying conceptual frameworks which are used as a foundation throughout the book. A summary of those is shown in Figure 1.1 (a summary of the concepts and measurements used in the case studies, noted by chapter, is to be found in Tables A1 and A2 in the Appendix).

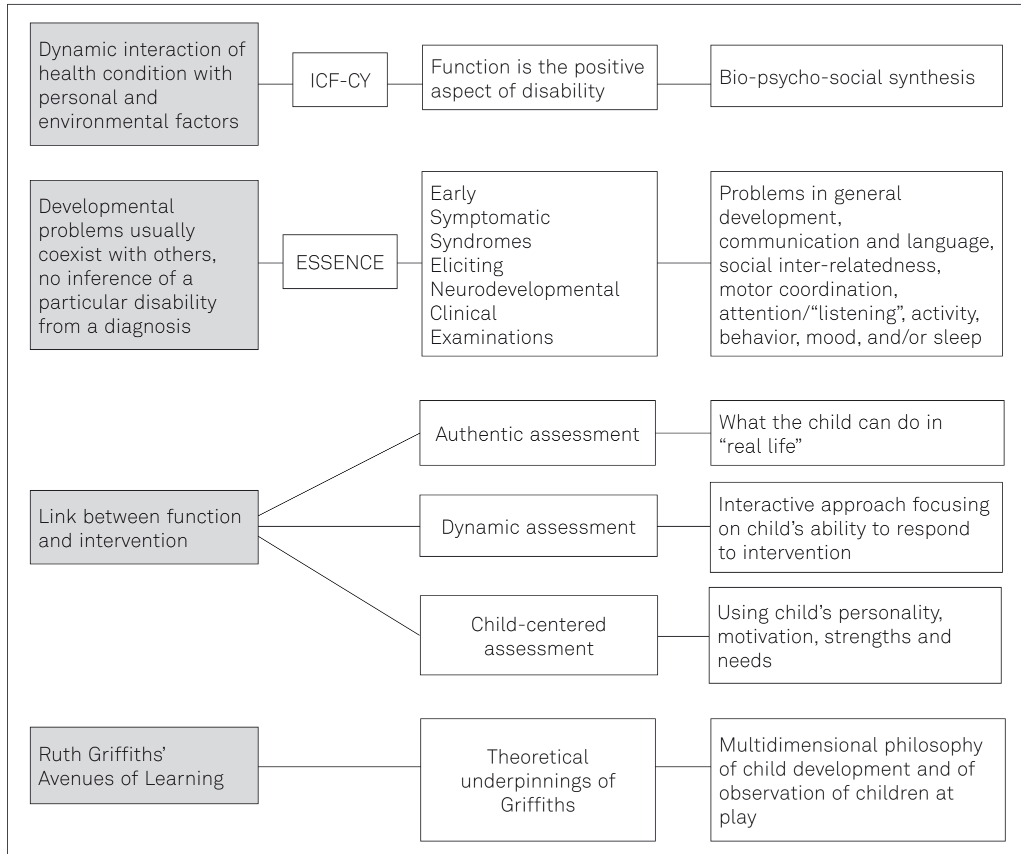

Figure 1.1. Four conceptual frameworks. ESSENCE = Early Symptomatic Syndromes Eliciting Neurodevelopmental Clinical Examinations; ICY-CF = *International Classification of Functioning, Disability and Health of Children and Youth*

Framework One: The ICY-CF

The *International Classification of Functioning, Disability and Health of Children and Youth* (ICF-CY; WHO, 2007) follows an approach in which data collected on the child are interpreted more widely, and it includes all those people who know the child in their different contexts. In this manner, a more complete profile of the lived experience of having a disability and its impact on daily life and activities is obtained. It is a version of the

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Griffiths III – A Child Development Assessment Tool	
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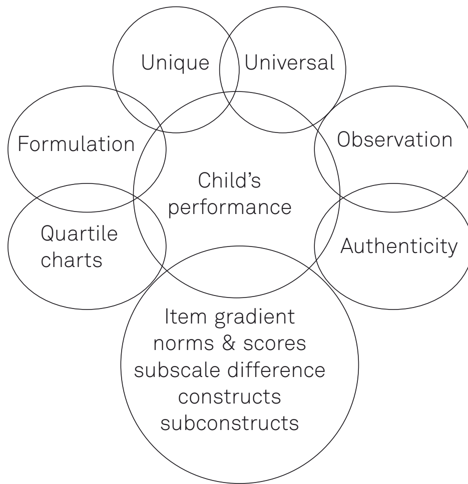	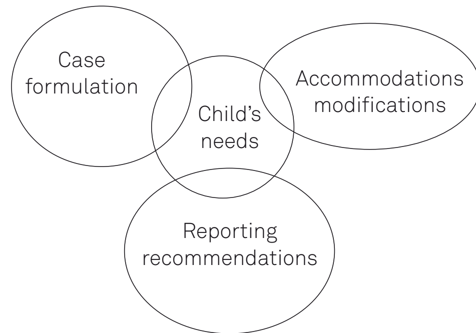

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Zone 1

Zone 1: Children With Symptoms of Learning, Physical, or Sensing Difficulties	
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Chapter 6	Poppy: A Child With Hearing Impairment and Congenital Cytomegalovirus Infection

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Chapter 6

Poppy: A Child With Hearing Impairment and Congenital Cytomegalovirus Infection

Jennifer Jansen

The Context

I am a clinical psychologist working in a university clinic based in South Africa. This case study describes a girl called Poppy who had a hearing impairment, possibly due to congenital *cytomegalovirus* (CMV) infection. Poppy's relatively late diagnosis of bilateral hearing loss was reported by health care professionals to play a significant role in her present general developmental delay. Of greatest concern to the health care professionals was her slow pace of both receptive and expressive language acquisition. Other possible reasons reported included both environmental and cognitive impingements.

Poppy was a 3-year-5-month-old English-speaking girl residing in an impoverished environment in South Africa. She had been diagnosed with a moderate bilateral hearing loss at the age of 2 years 10 months, and the only intervention prior to her developmental assessment was fitting her with hearing aids and irregular speech therapy sessions due to lack of parental cooperation. Another disabling factor was that Poppy's hearing aids were frequently in need of repair, resulting in no amplification of sound for lengthy periods of time.

She was referred by her speech therapist for a developmental assessment as Poppy displayed limited linguistic progress despite intermittent therapeutic interventions. She needed further evaluation for appropriate educational intervention. The objective of the assessment carried out by the clinical psychologist was to examine Poppy's current developmental functioning and provide an intervention plan for the future.

The Child

Poppy was born preterm by emergency cesarean section at 33 weeks of gestation. She weighed 1,200 g (2 lb 10 oz) and was jaundiced. Maternal preeclampsia and intrauterine growth restriction were recorded in her file. Poppy was noted to be hypotonic and anemic at birth. Her developmental milestones were not clearly remembered by her parents, but comments made by them indicated a general developmental delay.

Poppy was an only child and had not attended any type of formalized learning environment as her parents did not see this as a priority. The language spoken at home was English, but the larger community where Poppy spent most of her time, spoke a mixture of three languages – English, Afrikaans, and isiXhosa. The young parents never completed their schooling, and the family lived on a menial income from the two parental incomes,

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subscales, it could reasonably be assumed that there were significant developmental delays across all domains assessed. The scores supported concerns about future development and school placement. Table 6.1 shows the raw score conversions.

Table 6.1. Conversion of raw scores to scaled scores

Subscale	Scaled score	Development quotient	Percentile	Age equivalent
Subscale A	4	66	2	26 months
Subscale B	0	< 50	< 1	< 21 months
Subscale C	6	77	7	31 months
Subscale D	3	62	1	26 months
Subscale E	6	77	2	32 months
General development	0	50	< 1	25 months

To analyze the patterns regarding Poppy's skill deficits on all subscales, the items achieved or not achieved were analyzed on the Griffiths III Quartile Charts to evaluate her relative strengths and weaknesses. Poppy's functioning on the Year 3 is represented in Figure 6.2.

Base rates offer extra information on the difference in scaled score between subscales. Significant differences were found between Subscales A and B, Subscales B and C, and Subscales B and E. Qualitative analysis of the results indicated that Poppy's limited language acquisition and possible cognitive and environmental factors seemed to have influenced her scores across all developmental domains.

Constructs that were problematic on Subscale A were ways of thinking, play, auditory memory, and auditory processing. This was understandable as she had a hearing loss, and language is integral to the development of these constructs. Her inability to respond to questions regarding size concepts such as "big" and "small," as well as spatial concepts such as "Show me the cupcake in the 'middle,'" highlighted compromised concept formation. The constructs that evaluated play may have been influenced by limited cognitive ability and/or social isolation.

There were items that Poppy might have completed, but she did not understand the instruction given. She was unable to repeat simple digit series, which could have been the result of poor auditory processing, or problems with auditory memory or concentration, or an inability to hear. She successfully completed elementary formboards after demonstration, indicating that she had developed rudimentary visual imitation skills, which are essential skills for future learning. Throughout the assessment, tasks requiring concentration and reasoning were met with resistance.

On Subscale B, language and communication, Poppy's approach to task taking indicated that she had not developed skills for listening and did not understand the necessity for communication. She found it difficult to make her needs known verbally, leading to her parents finding it difficult to understand her, and regressed behaviors that were difficult

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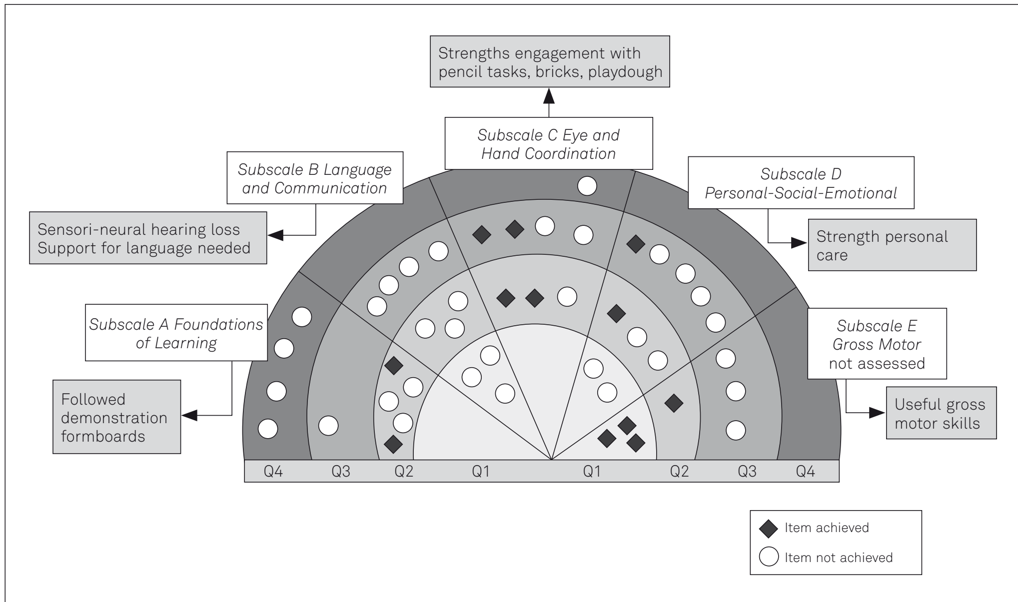

Figure 6.2. Distribution of items achieved or not achieved using the Griffiths III Quartile Chart Year 3. Q1 = Quartile level 1, achieved by 76–100% of typically developed children by year age; Q2 = Quartile level 2, achieved by 51–75% of typically developed children by year age; Q3 = Quartile level 3, achieved by 26–50% of typically developed children by year age; Q4 = Quartile level 4, achieved by 1–25% of typically developed children by year age

for the parents to handle. Her receptive language seemed better developed than her expressive skills, as she reacted to a few simple commands confined to pointing to everyday objects used in the home environment, such as cup, dog, and spoon, but not to those that were symbolically represented. She did however respond to verbs such as "jump" and "throw," but only when the actions were demonstrated.

Her limited receptive vocabulary and communicative intent, together with her permanent moderate bilateral hearing loss and impoverished environment, had played a significant role in her inability to attain basic expressive language skills. Poppy's expressive verbalizations were confined to a few single words, and no two-word utterances were expressed during the assessment. She had no desire to imitate words which are imperative for vocabulary development and expressive language.

Her Subscale C scores (for eye and hand coordination) suggested that this domain, although poorly developed, was a relative strength. She did complete one item in Year 4, as she was able to copy a circle (Stage 1). Poppy found fine motor items such as threading beads, undoing and fastening buttons difficult. Although she did engage in pencil and paper tasks, her execution of these activities did not go beyond rudimentary representations of the symbolic presentations.

On Subscale D, personal-social-emotional, Poppy responded to her name but did not give her name on request. She did not respond to the question, Are you a boy or a girl? Poppy had been toilet trained and partook in basic self-care tasks such as pulling up her elasticized pants. Her parents reported that she did not interact appropriately with peers and tended to resort to insular activities where no demands were made on her. She was an

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only child, with limited opportunities provided to engage with other children. Poppy did not pass items that require identification of basic emotions, expressions of thoughts and feeling, and participation in group play.

On Subscale E, gross motor, Poppy was able to perform basic gross motor and visual-spatial activities, such as throwing a short tennis ball and walking up and down stairs. Her balance posed a problem, which might be attributed to aberrant equilibrium responses and concomitant vestibular dysfunction often found in children with a bilateral sensorineural hearing loss (Masuda & Kaga, 2014). Poppy was unable to stand on one foot for 3 seconds or hop on one foot. She had midline difficulties such as crossing knees and feet when seated. Although her gross motor skills are not at an age-appropriate level, this area of functioning was a relative strength for her. Outdoor play also needs to form part of her intervention plan.

Check Your Progress

- Why were the Griffiths III Quartile Charts used?
- How did Poppy's hearing loss affect the assessment?
- Did she demonstrate difficulties which were not caused by her hearing loss?

Connecting the Dots

Poppy was a 3-year-5-month-old girl with a bilateral hearing loss, who was functioning in the far-below-average range on all of the subscales, and below the 50th quotient on the language and communication subscale. She presented with both internal and external barriers that would have the potential to impact on cognitive functioning and future learning.

Although her hearing had been amplified with state-funded bilateral aids, these devices were reported to often be broken. Scarcity of audiology appointments had meant that Poppy was still wearing the original earmolds which were ill-fitting at the time of the assessment and urgently needed to be replaced, as she was growing.

Her young parents had never completed their schooling and appeared to lack some basic understanding of child development. Thus, parenting was inconsistent and reactive. Limited exposure to goal-directed play and educational materials *had* possibly *also contributed* to Poppy's poor performance.

There had been no consistent carryover of new material learned in the individual speech therapy to the parents, and this had led to a disconnect between new information learned and practice at home. This had also led to interventions being fragmented, resulting in poor progress.

Poppy's strengths	Poppy's needs
• Engagement with pencil tasks, bricks, playdough • Personal care	• Management of her hearing impairment • Multiprofessional input for therapy and teaching

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Charting a Plan

As Eli has ASD and a learning difficulty, he is likely to struggle in a mainstream setting unless he has some extra support to enable him to access learning opportunities and make progress. It could be that a specialist school with smaller class sizes and specialist teachers, might be the best option for him. Box 9.1 shows a summary of his strengths and needs.

Box 9.1. Eli's strengths and needs

Strengths
- Eli is a visual learner; he is good at puzzles
- His gross motor skills are largely age appropriate
- He has some good self-help skills – he can feed himself and take his clothes off
- His fine motor skills are also a relative strength

Needs
- Eli finds it hard to focus and follow adult direction
- He can not communicate his wants and needs
- He struggles to communicate with others
- He does not know how to make relationships with adults or children
- He is not yet toilet trained
- He has no awareness of danger

Eli's visual skills need to be harnessed to help him learn to communicate using Augmentative and Alternative Communication (AAC). At first, he needs to be helped to understand how a symbol can be used to communicate with others. The Picture Exchange Communication System (PECS), which was developed in the US in 1985, is a language program that is used extensively in the UK (Bondy & Frost, 1985). It uses picture symbols to enable children with little or no language to communicate. A system of traffic light symbols could also be used at home and at nursery to help Eli understand when an activity was to start (green symbol), when it was nearly finished (orange symbol), and when it was to stop (red symbol) – this should help him be less frustrated. A simple visual timetable could be developed to help him to understand when things would happen. Once he begins to learn that symbols have meanings that enable him to interpret what is happening in the world around him, his level of frustration should decrease and his concentration increase. Traffic lights should also help Eli stop doing things that are dangerous, such as climbing up on high furniture, running off when out in the street, etc.

Eli is good at undressing, but not so good at dressing. *Backward chaining* could be used to help him understand how to put clothes on, starting with simple things such as socks and jogging bottoms. The technique of *backward chaining* involves breaking a practical task down into its component parts to enable the child to achieve full mastery of the task. Let us consider the task of putting on a sock: by starting with the simplest part of the task, i.e., putting one's toes into the rolled down sock, the child can be encouraged to learn how to pull the sock up a little until eventually they are able to put the whole sock on. The same process can then be followed by other tasks.

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