The role of the school ecology in facilitating resilience in adolescents with writing difficulties

by

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DECLARATION

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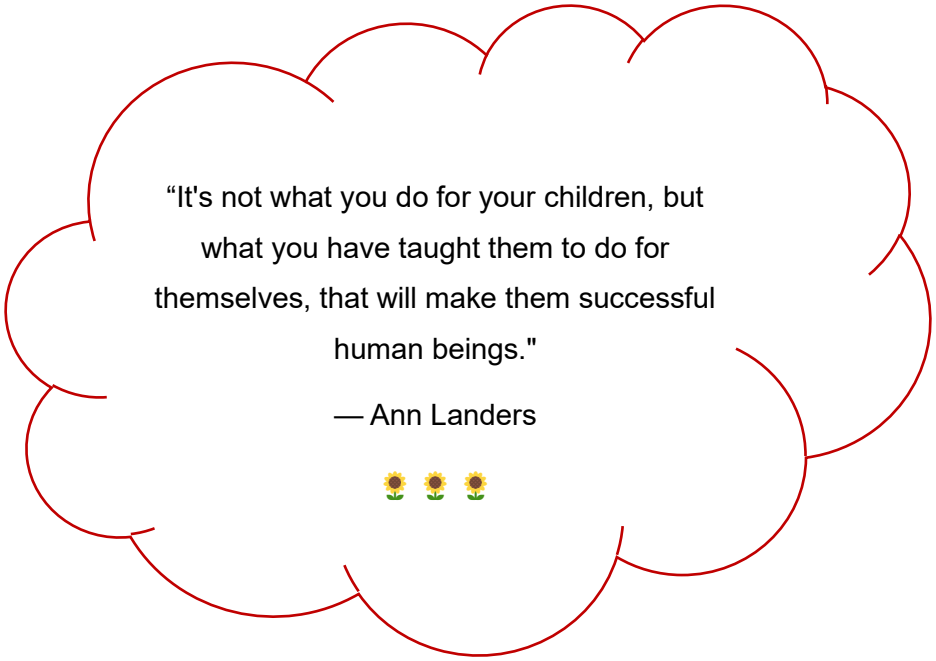
DEDICATION

This thesis is dedicated to:

My beloved parents, Abdul Wahab and Hawa, for all your unwavering support throughout this journey and beyond. Your love and guidance have inspired me to become the person I am today and have helped me reach this milestone.



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"وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ"

("My success is only by God")

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ABSTRACT

The purpose of this study was to explore the role of school ecology in facilitating resilience in adolescents with writing difficulties. Writing difficulties are neurological conditions that affect an individual's ability to complete written tasks successfully, often due to illegible handwriting, poor spelling, struggles with written expression, weakened motor skills, and executive function challenges. Learners with writing difficulties are typically diagnosed with dyslexia, dysgraphia, dyscalculia, developmental coordination disorder (DCD), or attention-deficit/hyperactivity disorder (ADHD). Through my experience as an educator, I became aware of how motor coordination disorder and dysgraphia were frequently overlooked or misattributed to dyslexia. This motivated me to investigate how school ecologies empower learners to cope resiliently with these challenges.

I followed a qualitative approach anchored in interpretivism, aligning with constructivism, in seeking to understand the facilitation of resilience through the various meanings and interpretations that emerged from participants' perspectives. Ungar's Social- Ecological Resilience Theory and Bronfenbrenner's bioecological systems theory provided the framework, highlighting resilience as a multisystemic construct shaped by interactions across individual, family, school, and community systems. A multiple case study design was employed, involving two sites: an independent, private mainstream school and a learners with special education needs (LSEN) school. Purposive sampling, guided by an advisory panel, recruited thirteen participants: nine teachers, two school-based professionals, and two parents. Data were generated through semi-structured interviews, observation field notes, and visual data such as photographs. The data were analysed using inductive reflexive thematic analysis, with codes developed from the data and organised into themes, with interpretation informed by Ungar's Social-Ecological Resilience Theory and Bronfenbrenner's bioecological systems theory.

Research findings suggest that resilience in adolescents with writing difficulties is rooted in protective and promotive processes within the individual, their family, environment, and culture. Because resilience does not depend on one specific resource or cluster of resources, this study underscores newer understandings of resilience as multisystemic, embedded within an individual's broader ecology, and developing through dynamic, reciprocal interactions among learners, their contexts, and available resources.

This study contributes to theory by linking themes previously noted in resilience studies directly to adolescent learners with writing difficulties. Since no previous studies have specifically documented writing difficulties and the role of the school ecology in supporting adolescent learners with writing difficulties, this study's contribution establishes a foundational

understanding and offers new theoretical and practical insights by identifying traditional and new resources associated with resilience. Furthermore, this research's interpretation encourages a shift in how adolescent learners with writing difficulties are conceptualised and highlights how school ecologies, as learning institutions, stand at the forefront of facilitating resilience. It encourages the school ecology (teachers, parents, school-based professionals) to work collaboratively with learners who experience writing difficulties to facilitate and encourage their resilience.

KEY TERMS:

Resilience, Writing difficulties, School ecologies, Adolescent learners, Dysgraphia, Protective and promotive resources, Writing strategies, Resilience theory, Bronfenbrenner's bioecological systems theory, Specific learning disabilities

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LIST OF ABBREVIATIONS AND ACRONYMS

ADD	Attention Deficit Disorder
ADHD	Attention-Deficit/Hyperactivity Disorder
AI	Artificial Intelligence
AP	Advisory Panel
APA	American Psychological Association
ASD	Autism Spectrum Disorder
AT	Assistive Technologies
CAPS	Curriculum and Assessment Policy Statement
CBT	Cognitive Behavioural Therapy
CoP	Community of Practice
DBE	Department of Basic Education
DBST	District-Based Support Team
DCD	Developmental Coordination Disorder
DoE	Department of Education
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5th ed.
ESS	Education Support Services
FET	Further Education and Training
GDE	Government Department of Education
ID	Intellectual Disability
IEP	Individual Education Plan
IGO	Intergovernmental Organisation
ILSTs	Institution-Level Support Teams
IQ	Intelligence Quotient
LD	Learning Difficulties
LoLT	Language of Teaching and Learning
LSEN	Learners with Special Education Needs
MP3	MPEG-1 Audio Layer III
MTTS	Multi-tiered Support Systems
NCESS	Education Committee on Special Support Needs
NGO	Non-Governmental Organisation
NSNET	National Commission on Special Educational Needs and Training
OT	Occupational Therapist
PE	Physical Education
PPCT	Process-Person-Context-Time

SASA	South African Schools Act
SBST	School-Based Support Team
SERT	Social Ecology of Resilience Theory
SIAS	Screening, Identification, Assessment and Support
SLD	Specific Learning Disabilities
SMT	School Management Team
STT	Speech-to-Text
TN	Tshwane North
TTS	Text-to-Speech
UDL	Universal Design for Learning
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISA	University of South Africa
WHO	World Health Organisation
ZPD	Zone of Proximal Development

CHAPTER 1

INTRODUCTION TO THE STUDY

The content of Chapter 1, along with the relative positioning of the topics, is graphically depicted in Figure 1.1 below.

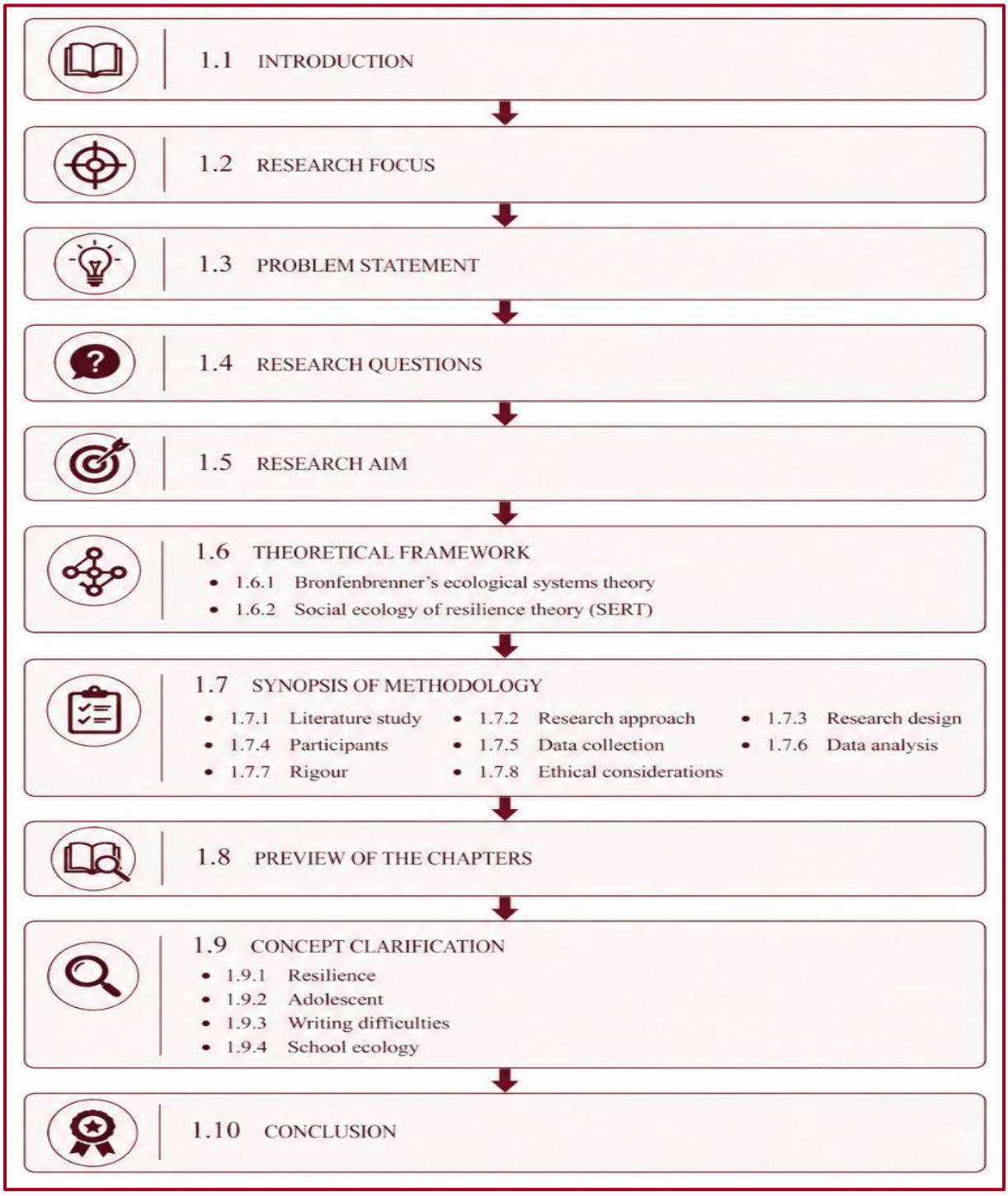


Figure 1.1: Overview of Chapter 1

1.1 INTRODUCTION

Adolescence is widely recognised as a critical developmental phase characterised by rapid cognitive, emotional, and social changes (Aremu & Lawal, 2024, p. 106). For adolescents with specific learning disabilities (SLD), such as writing difficulties, this period can be especially challenging. Writing difficulties are often associated with conditions such as dysgraphia (i.e., difficulties with handwriting and written expression), dyslexia (i.e., language-processing difficulties impacting reading and spelling), dyscalculia (i.e., difficulties with numbers and mathematical expressions) and dyspraxia (i.e., difficulties with motor coordination and planning) that can hinder academic performance, self-esteem, and social integration (Ahmad & Ansari, 2022, p. 9795). These challenges are often compounded by systemic barriers within mainstream education, where fast-paced classroom dynamics and limited specialised support can leave learners feeling excluded and misunderstood.

Internationally, resilience has emerged as a key construct in understanding how individuals adapt positively in the face of adversity (Masten et al., 2022, p. 239; Ungar, 2021, p. 10). In earlier studies, Masten (2001, p. 235) describes resilience as “ordinary magic”, a dynamic process through which individuals navigate and negotiate for resources that enable positive outcomes (Ungar, 2011, p. 10). Ungar (2021, p. 7) expands this view by emphasising the role of social ecologies, such as the family, school, and community, in shaping resilience. However, most resilience research has been conducted in Western contexts, with limited attention to how resilience manifests in under-resourced or culturally diverse school settings.

In South Africa, adolescent learners with SLDs often face compounded challenges due to systemic inequalities, limited access to specialised support, and social stigma (Chirowamhangu, 2024, p. 3; Jardinez & Natividad, 2024, p. 58; Motitswe, 2025, p. 2). Despite these barriers, some adolescents demonstrate remarkable resilience, often supported by their families, teachers, and school environments (Höltge et al., 2021, p. 581; Theron, 2021, p. 232). The South African school ecology, characterised by diverse cultural values, limited infrastructure, and varying levels of professional support, presents a unique context for exploring resilience. However, there is a notable absence of empirical studies that explicitly examine how the school ecology facilitates resilience in adolescents with writing difficulties.

This study aims to address this contextual and population gap by examining how school ecologies support resilience in adolescents specifically, with writing difficulties. It also aims to fill a theoretical gap in applying social-ecological understandings of resilience to the experiences of adolescents with writing difficulties within their school environments, as well as offer practical recommendations for teachers, parents and school-based professionals to collaboratively identify and mobilise resources that facilitate resilience. By investigating the

role of school ecologies, this study primarily aims to identify protective factors and practices that enable adolescents with writing difficulties to thrive.

1.2 RESEARCH FOCUS

This study is situated in Gauteng, South Africa, within two contrasting educational settings, a private mainstream school and a LSEN school for learners with diverse learning needs. These schools function within a broader national context characterised by systemic inequalities, multilingual and multicultural classrooms, and varying access to specialised support. Understanding this broader context is important, as it helps explain how different school environments influence the resilience of adolescents who experience writing difficulties.

Adolescence is widely regarded as a critical developmental phase, during which learners face heightened academic demands, increased expectations for written performance, and greater emphasis on formal assessment through writing (Baird et al., 2021, p. 1145; Ngwenya et al., 2023, p. 2). Importantly, assessment is evident across both formative and summative assessment practices. Formative assessments often include classroom activities, written exercises, and homework tasks which requires learners to engage regularly with written language, whereas summative assessments, involve tasks such as formal tests, examinations and written assignments which require learners to communicate their knowledge through writing within specified timeframes (Chauke & Tabane, 2024, p. 1; Firth, 2021, p. 34). However, for adolescents who struggle with writing, these demands often intensify existing challenges and lead to repeated experiences of academic failure, frustration, and marginalisation (Tidiya et al., 2024, p. 81). Moreover, such experiences extend beyond academic performance, affecting learners' emotional well-being, self-esteem, motivation, and overall engagement with schooling (Stein et al., 2024, p. 1; Tidiya et al., 2024, p. 81). Nationally, learners with SLDs, especially those experiencing writing difficulties, face compounded challenges. These include academic underperformance, emotional distress, social exclusion, and limited access to specialised support (Aremu & Lawal, 2024, p. 114; Ngubane et al., 2020, p. 2). While inclusive education policies exist (see appendix D), their implementation is inconsistent, and many schools lack the capacity to provide meaningful support. This creates a disconnect between the intended provision of inclusive education and the educational experiences of learners who experience writing difficulties.

Resilience is widely recognised as a dynamic process through which individuals adapt positively despite adversity (Masten, 2014, p. 6; Ungar, 2021, p. 6). International studies (Masten, 2021, p. 1; Masten et al., 2023, p. 24) have shown that resilience can be fostered through access to protective resources within one's ecological systems, particularly in

educational contexts. South African scholarship has further contributed to understanding resilience as a relational, contextual and culturally embedded process, which highlights the importance of social relationships and resources, culture and the unique context in understanding how individuals navigate adversity (Ebersohn, 2025, p. 6; Theron, 2023, p. 1034; Theron & van Breda, 2021, p. 2).

However, this research has been conducted in Western settings, where schools are generally better resourced and culturally homogeneous, with more developed and stable infrastructure, fewer systemic inequalities, reliable access to resources, smaller class sizes, and stronger support services. While these studies provide valuable insights into resilience processes, they do not adequately reflect the realities of learners in under-resourced, culturally diverse South African schools. By contrast, many South African schools function within a context marked by persistent structural inequalities, wide linguistic and cultural diversity, uneven distribution of resources, and the ongoing effects of poverty and social exclusion. Thus, resilience applied through Western perspectives without careful adaptation may lead to misinterpretation of learner needs, place responsibility solely on individuals without accounting for systemic conditions and potentially fail to recognise resilience processes rooted in unique family dynamics, communities, and indigenous knowledge systems.

Despite the growing interest in resilience theory and its application in education (Llisotella et al., 2023, p. 2; Masten et al., 2022, p. 239; Theron et al., 2022, p. 1), much of the literature has focused primarily on the diagnostic understandings of dysgraphia or SLDs in general, and largely in relation to young children. This creates a significant gap, as the experiences of adolescents with writing difficulties may not be fully captured by research that considers SLDs more broadly or focuses predominantly on younger learners. Studies on what enables individuals with writing difficulties to cope resiliently remain absent in the literature. What remains unexplored is how the school ecology, comprising relational, organisational, and cultural systems, facilitates resilience in adolescents with writing difficulties. There is a lack of context-specific research that examines the role of South African schools in promoting resilience among this vulnerable group

In light of this, the context of this study is particularly unique, as it draws a deeper perspective on writing difficulties as a core manifestation of SLDs. Since many individuals with SLD experience more than one disability concurrently, writing difficulties often lie at the core. Through the researcher's personal experience as an educator in the intermediate and senior phases, she became aware of motor coordination disorder and dysgraphia, which teachers frequently overlooked or mistakenly attributed to dyslexia. Recognising that this was a generic

way of dismissing learners' struggles, the researchers developed a stronger interest in understanding SLDs more comprehensively. Motivated by concerns about how learners progress and manage their schooling, a unique opportunity was identified to gather data on adolescents with writing difficulties, irrespective of the SLDs they have been diagnosed with, and to explore how the school ecology can empower them to cope resiliently with these challenges.

1.3 PROBLEM STATEMENT

Nationally, learners with SLDs, especially those experiencing writing difficulties, face compounded challenges. These include academic underperformance, emotional distress, social exclusion, and limited access to specialised support (Aremu & Lawal, 2024, p. 114; Ngubane et al., 2020, p. 2). While inclusive education policies exist, their implementation is inconsistent, and many schools lack the capacity to provide meaningful support. Despite these challenges, some adolescents demonstrate resilience, often with the support of their families, teachers, and school environments.

What remains unexplored is how the school ecology, comprising relational, organisational, and cultural systems, facilitates resilience in adolescents with writing difficulties. There is a lack of context-specific research that examines the role of South African schools in promoting resilience among this vulnerable group. With such insights, teachers and policymakers will be more likely to design effective, culturally responsive, and practically feasible interventions.

Addressing this gap, this study contributes to the resilience literature by offering a contextually grounded, school-ecology perspective on how resilience is fostered in adolescents with writing difficulties in South Africa, while also developing evidence-based recommendations for teachers and school-based professionals that effectively promote resilience.

1.4 RESEARCH QUESTIONS

The study was guided by the following overarching research question and supporting sub-questions:

Main research question:

How do school ecologies facilitate resilience in adolescents with writing difficulties?

Sub-questions:

- What insights do teachers, parents, and school-based professionals provide about the experiences and resilience of adolescents within their school environments?
- How do teachers, parents, and school-based professionals support adolescents with writing difficulties?

- Which school-based resources and practices are perceived to promote resilience in adolescents with writing difficulties?

1.5 RESEARCH AIM

The aim of the study was to explore how school ecologies facilitate resilience in adolescents with writing difficulties.

The aim was then further subdivided into sub-aims, namely:

- To investigate the lived experiences of adolescents with writing difficulties within their school environment.
- To explore how teachers, parents, and school-based professionals support adolescents with writing difficulties.
- To identify school-ecological resources, relationships and practices that promote resilience in adolescents with writing difficulties.
- To develop recommendations for enhancing the role of school ecologies in supporting resilience among adolescents with writing difficulties.

1.6 THEORETICAL FRAMEWORK

This study is underpinned by two complementary theoretical perspectives, namely Bronfenbrenner's ecological systems theory and the social ecology of resilience theory (SERT). Together, these frameworks provide a robust lens for understanding how adolescents with writing difficulties navigate adversity within complex school environments. Below is an overview of the applicability of these theoretical frameworks. Chapter 2 discusses the SERT, while Bronfenbrenner's ecological systems theory is explored in more depth in Chapter 3, Section 3.5.

1.6.1 Bronfenbrenner's ecological systems theory

Bronfenbrenner's ecological systems theory conceptualises human development as occurring within a nested system, namely, the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each system exerts influence on the individual (Guy-Evans, 2024, p. 1). In the context of this study, learners' immediate environment (e.g., family, classroom, peer group) interacts with broader systemic factors (e.g., school policies, community resources) to shape their resilience. This theoretical lens is particularly relevant for examining how school-based relationships and structures contribute to adaptive functioning in learners with writing difficulties, and will guide data interpretation by enabling the analysis of participants' accounts across these interconnected systems. Specifically, learners' adaptive functioning through the school ecology will be examined primarily in relation to microsystem influences, such as

teacher support, peer and family relationships; mesosystem interactions, including home-school collaboration; the exosystem factors, such as whole-school practices and resource availability, macrosystem factors through the geographical location of the schools which influence the economic situation, school policies, and the values and beliefs systems adopted both by the individual and the respective school ethos and lastly the chronosystem that reflects development over time In this way, the theory provides a structured framework for interpreting how school-ecology-based relationships and organisational structures operate as protective influences, ensuring that resilience is facilitated as a contextually embedded construct rather than an individually located one.

1.6.2 Social ecology of resilience theory (SERT)

SERT, as articulated by Ungar (2021, p. 131), expands the ecological view by emphasising the dynamic interplay between individuals and their social environments. Resilience is understood not merely as an internal trait but as a process of accessing and negotiating for culturally and contextually meaningful resources. The SERT complements Bronfenbrenner's ecological systems theory by extending the focus from identifying interacting systems to examining how learners actively engage with and negotiate support within those systems. While Bronfenbrenner's model provides a more structured understanding of the multiple ecological layers influencing development, SERT adds a dynamic, interactive lens that conceptualises resilience as a process shaped by access to culturally and contextually meaningful resources. This perspective emphasises the role of relational support, cultural identity, and systemic responsiveness, offering a critical lens for understanding resilience in South African schools, where adolescent learners with SLDs often face marginalisation.

These theoretical frameworks guided the analysis process and interpreation of the findings. Bronfenbrenner's ecological systems theory helped interpret the data through the different ecological levels (microsystem, mesosystem, exosystem, macrosystem, chronosystem). This meant that codes and themes were interpreted in terms of the relationships, structures, and wider systems influencing the resilience of adolescent learners with writing difficulties. The SERT further shaped the interpretation by focusing on how participants described adolescents' access to, navigation of, and negotiation of culturally and contextually meaningful resources. As a result, these frameworks ensured that resilience was not interpreted as an individual trait or characteristic, but rather as a relational and systemic process that is shaped by multiple layers of the school ecology.

1.7 SYNOPSIS OF METHODOLOGY

This study contains both a literature overview and a qualitative research design. These are summarised in Table 1.1 below and discussed in detail in Chapter 4.

1.7.1 Literature study

The relevant literature was analysed and tabulated in Table 1.1 below in alphabetical order, according to various themes.

Table 1.1: Overview of relevant literature sources

Theme	Related literature (alphabetical order)		
Resilience	Alzahrani, 2022 Anderson & Priebe, 2021 Antony, 2022 Bonanno, 2021 Bonnano et al, 2024 Bonanno et al, 2025 Booth et al., 2022 Bush & Roubinov, 2021 Collado-Soler et al., 2023 Cutuli et al., 2021 D'Angelo, 2022 Feldman, 2020 Fisher & Jones, 2024 Goldstein & Brooks, 2023 Grygorenko & Naydonova, 2023 Kuldas & Foody, 2021	Leys et al., 2020 Li et al., 2018 Luthar et al., 2000 Mahdiani & Ungar, 2021 Masten, 2001 Masten, 2006 Masten, 2011 Masten, 2014 Masten, 2018 Masten, 2021 Masten et al., 2021 Masten et al., 2023 Masten, 2024 Masten et al., 2024 Panter-Brick, 2021 Pearson et al., 2025 Roslan et al., 2022	Stainton et al., 2019 Saklofske et al., 2023 Sameroff, 2010 Shuttleworth-Edwards, 2016 Sisto et al., 2019 Terrana & Al Delaimy, 2023 Theron et al., 2022 Ungar, 2008 Ungar, 2010a Ungar, 2010b Ungar, 2011 Ungar, 2015 Ungar, 2021 Ungar et al., 2021 Van Rensburg et al., 2019 Vella & Pai, 2019 Wibowo, 2024 Windle, 2011 Zukerman et al., 2024
Risk factors and protective resources	Adak & Sarkar, 2023 Admadeli & Embu-Worho, 2021 Aldhafri et al., 2020 Alves et al., 2025 Arsini et al., 2023 Austin et al., 2023 Bandeira et al., 2023 Barnhart et al., 2022 Bertsia & Poulou, 2023 Beutel et al., 2017 Bonnie et al., 2019 Bozzini et al., 2021 Brooks & Bannigan, 2021 Butler et al., 2022	Cahill et al. 2019 Caleon & King, 2020 Chairani et al., 2019 Cherian, 2024 Chinyama et al., 2020 Cicchetti, 2010 Ciçek, 2021 Cutuli et al., 2021 Ebersöhn et al., 2015 Goldstein & Brooks, 2013 Hall & Theron, 2016b Hornor, 2017	Leys et al., 2020 Ronen, 2021 Rutter, 2023 Southwick et al., 2014 Theron & Van Breda, 2025 Twum-Antwi et al., 2020 Ungar et al., 2019 Ungar, 2021 Vaughn & DeJonckheere, 2021

Theme	Related literature (alphabetical order)		
Individual factors promoting resilience	Adak & Sarkar., 2023 Arsini et al., 2023 Austin et al., 2023 Beutel et al., 2017 Breda, 2018 Ciçek, 2021 Delhalle & Blavier, 2023 De Lorenzo et al., 2023 Echezarraga et al., 2021 Ellis et al., 2017 Friedberg & Malefakis, 2022 Fusco et al., 2018 Ge et al., 2020 González-Moreno et al., 2024 Grossman, 2021 Haffejee and Theron, 2019 Hanson & Hanson, 2018 Ibraeva et al., 2025	Kaya & Yagan, 2022 Kennison, 2022 Kirby, 2020 Kraut, 2020 Kruger & Prinsloo, 2008 Laranjeira & Querido, 2022 Li et al., 2018 Lin et al., 2024 López-Aymes et al., 2020 Mahdiani & Ungar, 2021 Marks et al., 2020 Martino et al., 2019 Masten, 2018 Mertens et al., 2022 Mohammadinia et al., 2018 Morris et al., 2024 Ni et al., 2024 Niaz et al., 2025	Panter-Brick, 2021 Pilram et al., 2020 Pitikoe & Morojele, 2017 Priyadarshini & Jose, 2025 Ploughman et al., 2020 Roffey & Quinlan, 2021 Ronen, 2021 Sagone et al., 2020 Sharma & Kaur, 2020 Sheymardanov et al., 2020 Shouhani et al., 2022 Theron et al., 2013 Theron, 2019 Theron et al., 2020 Trigueros et al., 2019 Van der Hallen et al., 2020 Van Harmelen et al., 2017 Stainton et al., 2019 Wehmeyer et al., 2021
Family factors promoting resilience	Aldhafri et al., 2020 Alves et al., 2025 Backes, 2019 Butler et al., 2020 Chairani et al., 2019 Cherian, 2024 Ebersöhn et al., 2017 Hall & Theron, 2016a	Kirby, 2020 Li et al., 2018 Madhavan et al., 2017 Masten, 2018 Simbai et al., 2025 Shengyao et al., 2024 Shirima et al., 2024 Stone et al., 2020 Susilo, 2020	Theron, 2019 Theron, 2020 Theron & Van Rensburg, 2020 Theron & Van Breda, 2021 Ungar et al., 2019 Ungar et al., 2021 Van Rensburg et al., 2019
Community factors promoting resilience	Ajitoni, 2024 Barnhart et al., 2022 Brooks & Bannigan, 2021 Butler et al., 2022 Cahill et al., 2019	Kuperminc et al., 2019 Li et al., 2018 Llistosella et al., 2023 Madhavan, 2017 Mampane, 2020 Masten, 2016	Sekgobela, 2025 Theron et al., 2011 Theron, 2019 Theron & Van Breda, 2021 Theron et al., 2022

Theme	Related literature (alphabetical order)		
	Caleon & King, 2020 Chinyama et al., 2020 Dias & Cadime, 2017 Ebersöhn, 2024 Furrer et al., 2014 Gilbrecht et al.,2025 Guo et al., 2020 Hall & Theron, 2016a Hall & Theron, 2016b Hermán, 2023 Howard et al., 2023 Isaacs et al., 2020 Jefferis & Theron, 2017	Masten, 2018 Mhaka-Muntepfa & Maundeni, 2019 Mohammadinia et al., 2018 Mugeere et al., 2020 Nieuwenhuis & Veennema, 2025 Panter-Brick, 2014 Panter-Brick, 2015 Pillay, 2023 Putri, 2024 Roszak, 2025 Russell & Qui, 2024	Theron, 2023 Thapa & Cohen, 2023 Thwala et al., 2019 Twum-Antwi et al., 2020 Ungar et al., 2019 Ungar et al., 2021 Van Breda, 2018 Van der Wal & George, 2018 Van Rensburg et al., 2019 Varghese, 2024 Wijesekara, 2019
Writing difficulties associated with dysgraphia	Agamugoro et al., 2023 Ashraf & Najam, 2020 Azri et al., 2025 Borges et al., 2020 Chung et al., 2020 Chung et al., 2022 Drotár & Dobeš, 2020 Dunn et al., 2021	Feifer, 2022 Friedmann & Gvion, 2023 Gargot et al., 2020 Hopcan & Tokel, 2021 Kalenjuk et al., 2022 Kurniawan et al., 2017 Lopez & Vaivre-Douret, 2023	Mawila, 2022 Mayes et al., 2019 Pankey, 2022 Reisman & Severino, 2020 Šafárová et al., 2021
The impact of writing difficulties as categorised by dysgraphia	Aro et al., 2021 Amerstorfer & Freiin von Münster-Kistner, 2021 Asselborn et al., 2018 Bonifacci et al., 2023 Biotteau et al., 2019 Chung et al., 2020 Chung et al., 2022 Devi & Kavya, 2023 Döhla et al., 2018 Drotar & Dobes, 2020 Dunn et al., 2021 Feifer, 2022 Filipe, 2021	Gary et al., 2023 Gargot et al., 2020 Gargot et al., 2021 Georgitsi et al., 2021 Hen-Herbst & Rosenblum, 2022 Hopcan & Tokel, 2021 James, 2022 Kalenjuk, 2022 Kalenjuk et al., 2022 Lomurno et al., 2023 Lopez & Vaivre-Douret, 2023	Matre & Cameron, 2022 Mayes et al., 2019 McBride, 2019 Mutlaq et al., 2024 Nielsen et al., 2018 Orim & Udie, 2023 Polak & Grossman, 2024 Reisman & Severino, 2020 Stowell, 2023 Šafárová et al., 2021 Tal-Saban & Weintraub, 2019
Support for dysgraphia applicable to writing difficulties	Alkhawaldeh & Khasawneh, 2024 Alnfiai & Kabir, 2024 Alzubaidi et al., 2021	García-Crespo et al., 2021 Garcia-Melga et al., 2022	Nabhan & Kamel, 2021 Nardacchione & Peconio, 2021

Theme	Related literature (alphabetical order)		
	Aram and Yashar, 2022 Aremu & Adewunmi, 2023 Back et al., 2024 Baggett et al., 2024 Berkowitz et al., 2021 Brady et al., 2021 Bonifacci et al., 2023 Bouck & Long, 2021 Carter, 2020 Carter et al., 2023 Carvalho & Santos, 2022 Çayak, 2021 Chan et al., 2022 Chung et al., 2020 DBE, 2014 DBE, 2016 Draper, 2023 Fitriyana et al., 2024	Ghaith & Awada, 2022 Guo & Keles, 2024 Han and Wang, 2025 Hardwick, 2021 Jayanti et al., 2024 Kalenjuk et al., 2024 Kambouri et al., 2023 Kwakkel et al., 2023 Langeveldt & Pietersen, 2024 Lehrl et al., 2020 Marquis et al., 2023 Masinading & Gaylo, 2022 Mavuso, 2022 McNicholl et al., 2019 Moss et al., 2024 Moyo & Hove, 2025 Mugeere et al., 2020 Myende & Nhlumayo, 2020	Naznin & Tabassum, 2021 Newman & Latifi, 2020 Obatta et al., 2020 Okkinga et al., 2021 Ontong & Rossouw, 2024 Paccaud et al., 2021 Rajchanovska et al., 2023 Ramos et al., 2022 Shaban et al., 2021 Shalaby & Agyapong, 2020 Shevchenko et al., 2024 Skae et al., 2020 Sun et al., 2022 Svensson, 2021 Twum-Antwi et al., 2020 Williams et al., 2024 Yenduri et al., 2023 Zulkifli et al., 2022

The above summary of sources indicates the absence of studies specifically examining adolescents with writing difficulties. This foregrounds the gap in this study.

1.7.2 Research approach

Qualitative research is an approach that seeks to explore, interpret, and understand social phenomena by examining individuals' subjective experiences within their natural contexts. It is particularly suited to studies that aim to generate rich, contextualised insights into complex social realities rather than to measure variables or test hypotheses (Tomaszewski et al., 2020, p. 2; Tunstall et al., 2022, p. 1114).

This study employs a qualitative research approach within an interpretivist paradigm to investigate the role of school ecologies in promoting resilience among adolescent learners with writing difficulties. The interpretivist paradigm is appropriate, as it emphasises understanding reality through the meanings individuals ascribe to their experiences within

specific social and cultural contexts (Junjie & Yingxin, 2022, p. 12; Tomaszewski et al., 2020, p. 1). Knowledge is therefore viewed as socially constructed and shaped through interaction.

A qualitative approach is considered most suitable for addressing the purpose and research questions of this study, which seek to explore and interpret how the school ecology facilitates resilience in adolescents with writing difficulties (Lim, 2025, p. 200). The study aims to provide multiple perspectives from teachers, parents, and school-based professionals working with adolescent learners with writing difficulties and to offer a holistic understanding of how the school ecology facilitates resilience among these learners.

1.7.3 Research design

A multiple case study design was selected to allow for in-depth exploration across two distinct school settings: a mainstream private school (School A) and a special education needs school (School B) in Gauteng, South Africa.

According to Remenyi (2022, p. 1) and Schoch (2020, p. 245), case study research can be described as a detailed, empirical strategy of inquiry that seeks to investigate a contemporary phenomenon within its actual social and cultural setting. Given that the proposed study aims to investigate how school ecology promotes resilience among adolescents with writing difficulties, a multiple case study is an appropriate research design. A multiple case study allows the researcher to extend analysis beyond the boundaries of a single context, thereby enabling comparisons across different social settings. This design further supports the identification of similarities and differences between cases, strengthening analytical depth and interpretive insight (Chowdhury & Shil, 2021, p. 204; Remenyi, 2022, p. 25). In this study, each school (School A and School B) is treated as a bounded case. In each case, teachers, parents, and school-based professionals formed part of the case context.

1.7.3.1 Research paradigm

A paradigm can generally be understood as a set of assumptions or beliefs about reality that give rise to and shape a particular worldview. It serves as a lens or set of guiding principles by which reality is interpreted (Khatri, 2020, p. 1435). Ugwu et al. (2021, p. 117) state that a paradigm can be viewed as a set of beliefs that guides the actions put forward, in terms of intent, motivation, and expectations for the study. It can also be referred to as a worldview (Ugwu et al., 2021, p. 117), which is shaped by the area or field of study, the beliefs of individuals within that field, and past research experiences. This study employs a qualitative research approach anchored in interpretivism, aligning with constructivist principles.

Both perspectives are worldviews which emphasises and seeks to understand a particular phenomenon. It emphasises the meaningful nature of people’s character and participation in

social contexts (Ugwu et al., 2021, p. 120). The interpretivist view holds that reality is socially constructed through the multiple experiences individuals encounter within their social or natural environment (Pervin & Mokhtar, 2022, p. 421; Ugwu, 2021, p. 120). Multiple realities exist through the sharing of meanings and interactions among individuals; therefore, reality cannot be determined objectively (Pervin & Mokhtar, 2022, p. 421). This understanding of reality also acknowledges the relationship between interpretivism and constructivism, as meaning is developed through individuals' interactions and experiences. Van der Walt (2020, p. 124) highlights this relationship by explaining that interpretation and construction are interconnected, with interpretation referring to the process of developing meaning and construction reflecting the meanings developed through this process. In this study, consideration of constructivist principles therefore complements the interpretivist position by recognising that participants' meanings and interpretations are shaped through their experiences and interactions. In addition, considering the underlying principles of constructivism; will ensure that the culture, context and social relationships are utilised to construct knowledge. Hence, resilience represents constructivism as adolescent learners are guided towards achieving more than adaptive outcomes (Masten, 2018, p. 2)

The interpretivist paradigm is considered to be most relevant to this study, as it aims to explore and understand the subjective realities of adolescents experiencing writing difficulties, as well as the multiple roles played by the school ecology, including all relevant stakeholders, in facilitating resilience. Adopting an interpretivist lens enables the researcher to develop a comprehensive understanding of how the school environments in which these adolescents function may support resilience processes, and how members of the school ecology perceive the effectiveness of their roles in this regard. Interpreting these realities and perceptions provides rich, in-depth data that may inform the development of a contemporary model for understanding resilience among adolescents with learning difficulties (LD) within the broader school ecology.

Collins and Stockton (2022, p. 1) describe the role of the researcher in qualitative research as that of an instrument, or as "playing a part in a scene," through which data are generated and analysed. In this sense, the researcher gradually becomes a co-creator of knowledge (Tunstall et al., 2022, p. 1114). Collins and Stockton (2022, p. 1) caution, however, that such interaction requires clearly defined parameters and an appropriate degree of distance in order to minimise researcher bias. Within an interpretivist framework, observation is viewed as fallible and open to error, while theory is understood as provisional and revisable (Lourie & McPhail, 2024, p. 395). Although the presence of the researcher inevitably influences the research process, given the subjective and socially constructed nature of human experience, deliberate steps must be taken to reduce prejudice and limit unavoidable bias. This reflexivity ensures that

analysis remains transparent, acknowledging the lens through which resilience is understood and defined.

One strategy employed to mitigate bias was the explicit articulation of assumptions at the outset of the study. By making assumptions transparent, readers are able to evaluate whether and how these assumptions may have influenced interpretations and conclusions (Zahle, 2025, p. 613). The study was therefore approached with the following assumptions:

- Members of the school ecology, including parents, teachers, and school-based professionals, possess valuable knowledge about resilience and play a vital role in facilitating resilience among adolescents with writing difficulties.
- Members of the school ecology are able to promote and apply teaching and learning practices both at school and at home, incorporating strategies and techniques that support resilience.
- Members of the school ecology acquire knowledge and skills through enactive processes, that is, learning through interactive and lived experiences. Through whole-school support, they are therefore able to effectively guide and support learner resilience.
- Members of the school ecology have experience working with learners diagnosed with specific learning disorders, including writing difficulties, and thus have an informed understanding of how to foster resilience.
- Adolescent learners with writing difficulties included in this study were already identified as functioning resiliently despite their challenges. These learners demonstrate determination, optimism, and perseverance in the face of setbacks.
- Such learners require support and acceptance from their families, peers, schools, and communities, particularly in contexts where high standards are set both by themselves and by others. Their participation in family, school, community, and cultural contexts, as well as the attachments and processes within these systems, may protect them from vulnerability and promote resilient functioning.

Guided by these assumptions, the researcher's interpretation sought to transform dominant understandings of SLDs and writing difficulties by foregrounding learner strengths rather than their deficits. The aim was to provide recommendations and guidelines on how members of the school ecology, through pedagogical practice and available resources, can support learners in facilitating resilience, as the potential of learners with writing difficulties to function at their full capacity is often overlooked.

Since this study focused on identifying protective factors and resources within the school ecology that enable resilience for adolescent learners with writing difficulties, emphasis was

placed on strengths and resilience-enhancing processes rather than on risks and deficits. At the same time, this transformative and strengths-based approach required careful reflexivity to ensure that contradictory evidence was not overlooked or marginalised during analysis.

1.7.4 Participants

This study included two case studies: a private, independent mainstream school and a LSEN school. Purposive sampling (Ahmad & Wilkins, 2024, p. 3) was employed to recruit participants from the respective schools who are directly involved in the education and support of adolescents with writing difficulties. An Advisory Panel (AP) was used to identify learners perceived as resilient. At School A, the principal, support staff member (responsible for remediation and administrative functions), and teacher (also a member of the school-based support team (SBST)) were part of the AP. At School B, the deputy principal and a teacher (also a member of the SBST) were part of the AP. All AP members were familiar with the adolescent learners and confirmed that these learners demonstrated resilience despite ongoing academic and contextual challenges. In this way, the AP guided the identification and approach of teachers as primary participants in the study, and through the identified, consenting teachers, the researcher was subsequently able to approach the remaining four primary participants, namely the parents and school-based professionals (i.e., occupational therapist (OT) and educational psychologist), to participate in this study. This is discussed further in Chapter 4.

The participants at School A consisted of five teachers, two parents, and an on-site OT, all of whom were directly involved in supporting adolescents with writing difficulties. School B consisted of four teachers and an educational psychologist who similarly offered insights into how adolescents at this school demonstrated resilience. Together, these participants provided rich, case-specific perspectives on how resilience was facilitated within each school ecology. Although the study focuses on resilience among adolescent learners with writing difficulties, I did not include adolescents as direct participants since the study specifically sought to understand how resilience is facilitated within the school ecology from the perspectives of teachers, parents and school-based professionals who support these learners. The study therefore adheres to providing an adult stakeholder perspective on the facilitation of resilience rather than representing the learners' own voices, which is acknowledged as a limitation.

1.7.5 Data collection

Mwita (2022, p. 313) notes that interviewing is one of the most commonly used data collection methods in qualitative research. An interview can be described as a social encounter between

the researcher and participants, involving an interactive exchange of information in which the researcher poses questions and participants respond accordingly. This process allows the researcher to gain insight into the phenomenon under investigation through participant perspectives (Elhami & Khoshnevisan, 2022, p. 1)

In this study, data were collected through semi-structured interviews, field notes, and photographs, enabling the collection of rich and contextualised insights. The interview questions were open-ended and followed a conversational, exploratory approach, allowing participants to elaborate on their experiences and perspectives, while allowing flexibility to probe issues that emerged during the discussions. The basic questions asked during the interviews were as follows:

- What are writing difficulties, and how do they manifest?
- What challenges do adolescent learners with writing difficulties experience?
- How do you understand the concept of resilience?
- What factors within the school support the resilience of adolescent learners with writing difficulties?
- How do teachers support the resilience of adolescent learners with writing difficulties?
- How do parents support the resilience of adolescent learners with writing difficulties?
- What supportive resources are available to support learners with writing difficulties?

During visits to the school, the researcher also observed the school environment and collected visual data, such as photographs. Observations were recorded in a reflective journal and documented as field notes to capture contextual details and emerging insights (Busetto et al., 2020, p. 3). In addition, follow-up interviews in the form of post-interview discussions were conducted with participants, during which further information relevant to the study was generated and recorded as field notes. These follow-up discussions were guided by the same interview questions used in the initial interviews (see Appendix A).

A transcript of an interview with a primary participant is included in Appendix A, while the remaining interview transcripts are available upon request.

1.7.6 Data analysis

Thematic analysis was employed to identify patterns and themes related to resilience-supportive practices within the school ecology (Braun & Clarke, 2021, p. 331; Finlay, 2021, p. 103). Firstly, the interviews were transcribed verbatim (Byrne, 2022, p. 1398). The researcher then engaged in repeated reading of all interview transcripts to familiarise herself with the data and to gain a global sense of the content and meanings expressed by participants (Braun & Clarke, 2021, p. 331). This initial phase of familiarisation allowed the researcher to immerse

herself in the data and begin reflecting on emerging patterns relevant to the study. The theoretical frameworks underpinning the study, namely SERT and Bronfenbrenner's ecological systems theory, provided a theoretical basis for understanding resilience and the school ecology. However, these frameworks did not predetermine the coding process. Instead, coding remained grounded in the participants' accounts, with the researcher remaining attentive to patterns and meanings emerging from the data. This ensured that coding captured both the personal experiences of adolescent learners with writing difficulties and the broader ecological supports that enabled them to build resilience despite their challenges.

Thereafter, the interviews were colour-coded as part of an inductive coding process. The development of initial codes was informed by the researcher's theoretical understanding of resilience (Chapter 2), writing difficulties, and their impact on adolescent learners (Chapter 3). Consistent with thematic analysis, coding was understood as an active and interpretive process, shaped primarily by the researcher's engagement with the data and the meanings expressed by participants. The theoretical frameworks were subsequently used to interpret the themes that emerged from the coding process.

Related codes were subsequently clustered and developed into potential themes, which were iteratively reviewed and refined to generate final themes. Following the development and refinement of the themes, the findings were subsequently considered in relation to the microsystem, mesosystem, exosystem, macrosystem and chronosystem to examine how the resilience-enabling resources identified in the data were situated within the broader school ecology. These themes captured how adolescent learners with writing difficulties coped with challenges and how they were supported in developing resilience within their school contexts. While the analysis was predominantly inductive and aligned with open coding, elements of axial coding were also employed to explore relationships between codes and to organise them into coherent thematic structures (Appendix B). This process supported the development of themes that explain how school ecology supports adolescent learners with writing difficulties and how available resources within the school environment facilitate resilience (Braun & Clarke, 2021, p. 331).

The same reflexive analytic process was applied to the follow-up interview field notes, research observations, and visual data. Analysing multiple data sources in this manner enabled triangulation and contributed to a richer, more nuanced understanding of how school ecologies shape resilience processes among adolescents with writing difficulties. The process of thematic analysis is discussed further in Chapter 4, Section 4.4.3.

1.7.7 Rigour

To ensure trustworthiness, the study applied strategies such as credibility (member checking), transferability (thick description), dependability (audit trail), and confirmability (reflexivity and triangulation). Ethical clearance was obtained from the University of South Africa (UNISA), and all participants provided informed consent in accordance with the ethical standards for research. Trustworthiness was pursued rigorously in the study (as documented in Chapter 4, Section 4.5).

1.7.8 Ethical considerations

This study adhered to strict ethical standards to ensure the protection, dignity, and rights of all participants. Permission to conduct the study was obtained from the Governemnt Department of Education (GDE) while ethical clearance was obtained from the UNISA (2024/07/12/00000099/02/RB). All research activities were conducted in accordance with the institution's guidelines for research involving human participants. All procedures that were followed are discussed in detail in Chapter 4, Section 4.6.

1.8 PREVIEW OF THE CHAPTERS

Chapter 1: Introduction to the study. This chapter consists of a general summary of the study.

Chapter 2: Understanding resilience. This chapter focuses on the nature of resilience and the protective factors and processes that influence an individual's ability to function resiliently.

Chapter 3: Supporting adolescent learners with writing difficulties: a resilient pathway. This chapter focuses on adolescent learners with writing difficulties (also more commonly associated with dysgraphia), a core manifestation of SLDs, and its impact on the individual's life. Bronfenbrenner's ecological systems theory also contributes to the broader discussion on supporting learners' resilience.

Chapter 4: Research design and methodology. The aims, objectives and methods of research are outlined in this chapter.

Chapter 5: Results of empirical research. In this chapter, the research results are presented to answer the research questions.

Chapter 6: Conclusion and recommendations. This chapter concludes with an empirical and literature analysis, followed by the limitations and recommendations for further study.

1.9 CONCEPT CLARIFICATION

1.9.1 Resilience

The conceptualisation of resilience, as defined by Masten (2014, p. 1), is the "capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability,

or development." This capacity for reintegration and managing disturbances can be perceived as a process that facilitates positive adaptation despite significant risk (Anderson & Priebe, 2021, p. 690). Ungar (2021, p. 9) describes resilience as the ability to cope with internal and external stressors, reinforced through negotiating protective factors within an individual's social-ecological system. Resilience rests on three aspects: exposure to risk or adversity, contextual specificity of protective processes, and negotiated outcomes. Thus, navigating and negotiating protective resources within one's ecological system in response to adversity results in positive adaptation (Ungar, 2021, p. 10). Coping is integral to this process, triggering resilience mechanisms that lead to competence (Liem, 2022, p. 276). Resilience can also occur systemically, as the individual's capacity depends on the context of their social-ecological systems (risk exposure and protective resources).

In line with Bronfenbrenner's ecological systems theory, resilience follows a transactional process, supporting adolescents through reciprocal interactions within their immediate environments to positively adapt to adverse circumstances (Bush & Roubinov, 2021, p. 37). For the purpose of data analysis, resilience is operationally defined as the capacity of the individual to display positive outcomes and/or positive adaptation through the culturally and contextually embedded support provided by the school ecology.

1.9.2 Adolescent

Adolescence is a transitional period marking the transition from childhood to adulthood, presenting a unique phase of development in the life span of every individual (Ngwenya et al., 2023, p. 2). Although the typical age span of adolescence has been known to be between 10 and 19 years (Ngwenya et al., 2023, p. 1), the World Health Organisation (WHO, 2015) defines young adulthood as a later phase of adolescence, which extends the age span of adolescence between 10 and 24 years of age (Baird et al., 2021, p. 1156). According to Best and Ban (2021, p. 1), adolescence typically marks the onset of puberty and concludes with complete physical growth and maturity. This transitional period involves physical, neurodevelopmental, psychological, and social changes, as well as advanced intellectual development (Best & Ban, 2021, p. 1; WHO, 2017). Thus, an adolescent in the context of this study refers to a biologically maturing individual between the ages of 10 and 24 years old, attending a mainstream or LSEN school in grades 7–12.

1.9.3 Writing difficulties

The concepts of writing difficulties, writing challenges, and dysgraphia are used interchangeably in educational contexts. However, within the scientific literature, dysgraphia is the preferred term, defined as "a neurologic disorder of written expression at any developmental stage that manifests as persistent difficulty in executing certain writing skills

such as letter formation, writing legibly, letter spacing, spelling, fine-motor coordination, writing speed, grammar, and composition" (Chung et al., 2020, p. 47; Elizabeth & Adewunmi, 2023, p. 57; Gary et al., 2023, p. 15). Dysgraphia is categorised broadly as a specific learning disability. However, writing difficulties are also observed in learners with other SLDs, such as dyslexia, dyscalculia, developmental coordination disorder (DCD)/dyspraxia, attention-deficit/hyperactivity disorder (ADHD), or language processing disabilities. These conditions are classified as neurodevelopmental disorders that affect one or more basic psychological processes involved in understanding or using language, including reading, written expression, or mathematics (Dunn et al., 2021, p. 35; Farrell, 2021, p. 5). For the purpose of this study, writing difficulties refer to individuals who experience significant difficulty with writing tasks due to SLDs, whether arising from intrinsic or extrinsic risk factors. Whereas the concept of dysgraphia will be used to expand the discussion on the constituents of writing difficulties.

1.9.4 School ecology

The school ecology is perceived as an institution with multiple systems that provide regulatory support to learners. These systems are relational and organisational. Relational systems involve key role players within the school, such as learners, staff members, and legal guardians/parents, and the interactions between these role players, which are crucial for a successful learning environment (Theron, 2021, p. 233). The organisational systems on the other hand, encompasses the physical structure of the school such as the building and geographical location, the educational practices at schools such as the curriculum, teaching methods, and policies, which significantly influence student learning outcomes and experiences, as well as the administrative structure, including school management and decision-making processes involving entities like the district-based support team (DBST) and SBST, which affects the overall efficiency and efficacy of the school. The school community and culture, shaped by the surrounding urban community and prevailing cultural values, customs, and expectations, also play a significant role in the educational experience. Additionally, the availability of resources, including funding, learning materials, and technology, impacts the school's ability to deliver high-quality instruction, also contributing to the dynamics of the school ecology (Tapia-Fonllem et al., 2020, p. 2; Theron, 2021, p. 234). In this study, the term 'school ecology' refers to mainstream and special education schools that support and provide meaningful learning opportunities to champion the resilience of adolescent learners with writing difficulties.

1.10 CONCLUSION

This chapter provided an orientation to the study and established the significance of exploring resilience in adolescents with writing difficulties within South African school ecologies. The

study's originality lies in its focus on contextually grounded resilience processes, informed by ecological and social theories, and its potential to contribute to inclusive practices.

The next chapter presents the foundations of resilience, offering a critical review of relevant literature on SERT as a theoretical framework that informs the study's analytical lens.

CHAPTER 2

UNDERSTANDING RESILIENCE

The content of Chapter 2, along with the relative positioning of its topics, is depicted graphically in Figure 2.1 below.

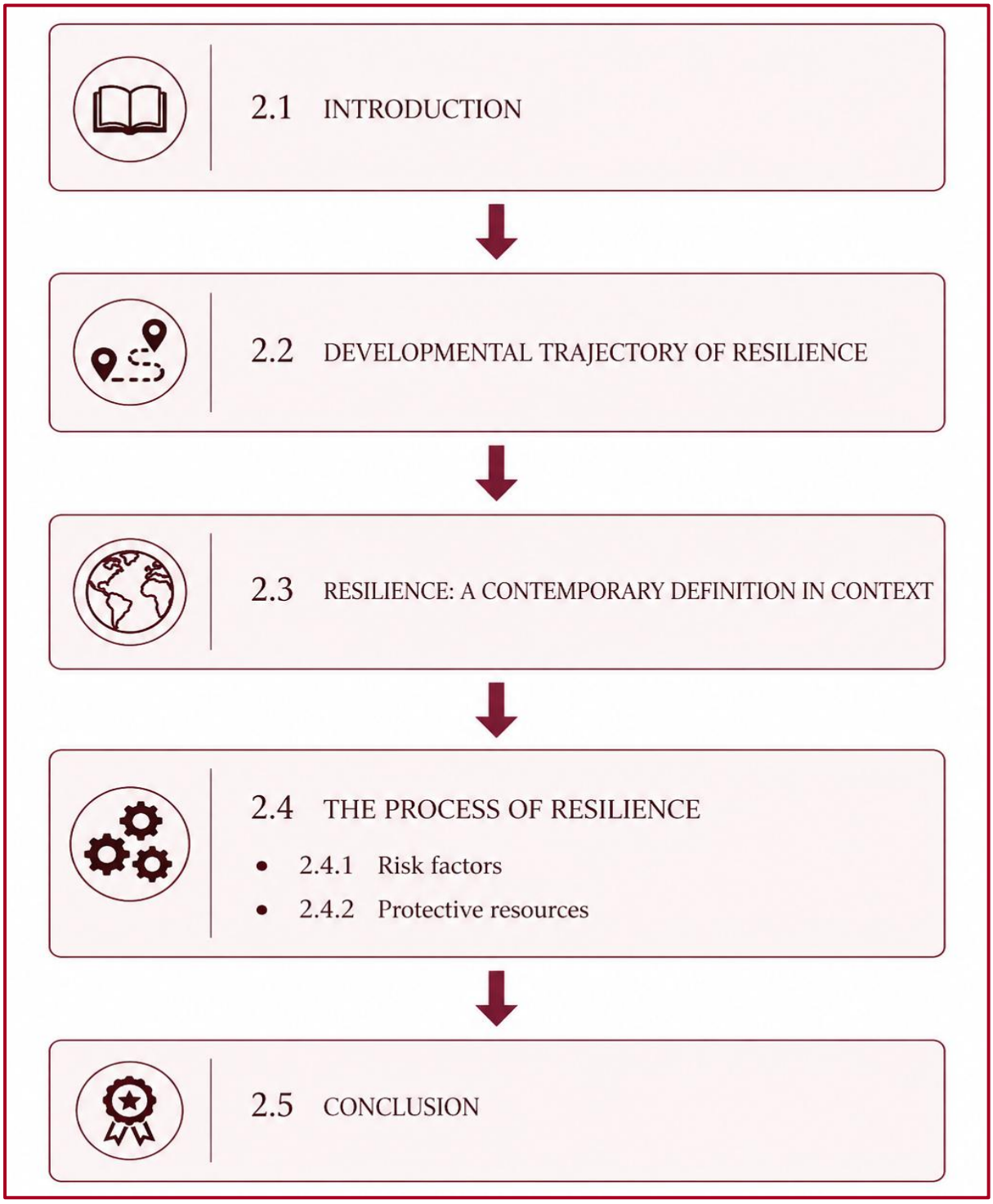


Figure 2.1: Overview of Chapter 2

2.1 INTRODUCTION

Stress is a daily reality for every individual. At some point, every individual will be exposed to one or more potentially life-threatening or traumatic experiences. No individual is exempt from hardship. When difficult circumstances arise, such as a crisis or tragedy, individuals often exhibit negative outcomes. Continuous exposure to a stressful event(s) or harmful environment increases the risk for developing unfavourable outcomes (Ungar et al., 2021, p. 6). An environment is potentially harmful when it is characterised by significant adversity. When exposure to stressful events or environments is intense, uncontrollable, and particularly overwhelming, life can be extremely challenging and demanding for adolescents (Mahdiani & Ungar, 2021, p. 149).

However, when adolescents thrive in life and respond adaptively despite being affected by significant adversity, they are identified as resilient (Alzahrani, 2022, p. 23; Collado-Soler et al., 2023, p. 1366; Masten, 2021, p. 2). This phenomenon, in which some individuals cope more easily and can adapt positively to life's challenges, still intrigues researchers (Rutter, 2023, p. 123).

As this research aims to understand how the school ecology facilitates the resilience of adolescent learners with writing difficulties, it is essential first to gain insight into the concept of resilience. Thus, this chapter defines resilience and provides an overview of the history of resilience research, tracing its progression over the years to its current state. The chapter also describes the risks that make life more difficult for adolescents and the protective resources that help them to adjust in positive ways.

2.2 DEVELOPMENTAL TRAJECTORY OF RESILIENCE

Over the past five decades, the study of resilience has undergone several waves that have reframed our understanding of resilience, its development, and its support (Cutuli et al., 2021, p. 172). These waves collectively shift the field from viewing resilience as an innate trait to understanding it as a dynamic, multisystemic, and culturally embedded process (Masten et al., 2023, p. 33; Ungar et al., 2019, p. 616). This section summarises the four waves and highlights the implications most relevant to adolescents, particularly those navigating learning and writing difficulties within school ecologies.

In the **first wave**, researchers focused on describing resilience as they sought to identify ways to avoid psychopathology (Masten et al., 2021, p. 523; Masten et al., 2023, p. 20). Informed by neurobiological studies, the study of resilience emerged in developmental psychopathologists' efforts to identify those factors which presented in the lives of individuals who were able to thrive in the face of adversity and achieved favourable health outcomes (adaptive coping), as compared to those who were unable to do so (maladaptive coping).

However, research in this wave overemphasised individual traits, largely overlooking how contextual assets shape developmental outcomes (Saklofske et al., 2023, p. 252). In other words, it was understood that the unique qualities of the individual alone could not account for resilient outcomes, and that the presence of other potential assets or protective factors was responsible for the individual's ability to live well despite adverse life circumstances and exposure to extreme adversity. Although limited in its trait-focused orientation, the first wave laid the foundation for later waves.

The **second wave** shifted towards a developmental process perspective, emphasising how resilience emerges from interactions between individuals and their environments (Masten, 2011, p. 493). The focus shifted from identifying the qualities that resilient individuals possess to examining *how* resilience develops across various life phases (Vella & Pai, 2019, p. 236). Studies have increasingly examined protective processes, such as attachment relationships and family dynamics, that support adaptation (Masten et al., 2023, p. 29). Despite improved conceptual clarity, researchers could observe resilience processes but were unable to fully specify their mechanisms, prompting the emergence of a third, more experimental wave (Masten, 2018, p. 13).

The **third wave** introduced intervention-focused research to test resilience processes through programmes and policies supporting children experiencing adversity (Masten, 2024, p. 2544; Pearson et al., 2025, p. 441). Findings reinforced the idea that resilience is ordinary, widely distributed, and highly context-dependent (Masten, 2001, p. 233). For instance, early pioneers (e.g., Rutter, Garmezy, Werner) documented how positive parenting and caregiving quality significantly mediate resilient outcomes (Masten, 2011, p. 493; Pearson et al., 2025, p. 442). This insight contributed to a major paradigm shift. It shifted from a deficit-based approach to a strength-based, multisystemic approach (Masten, 2014, p. 501). The collaborative, multidisciplinary work emerging from this wave laid the groundwork for the fourth wave.

The **fourth wave** integrates biological, developmental, and social-ecological processes. Rapid advances in genetics, neurobehavioural development, and analytical methods deepened understanding of how adaptation is shaped by psychological and neural self-organisation (Masten, 2024, p. 2545). Resilience is now conceptualised as a dynamic, multisystemic process, influenced by risk exposure, available resources, and the quality of interactions between individuals and their environments (Ungar et al., 2019, p. 616; Ungar et al., 2021, p. 9).

This integrative perspective highlights that individuals adapt by leveraging strengths within supportive and modifiable contexts (Masten et al., 2023, p. 20). Emerging interpretations from this wave reinforce resilience as a contextual and developmental capacity, rather than an

inherent attribute (Masten et al., 2023, p. 36). Figure 2.2 below summarises the four waves of resilience.

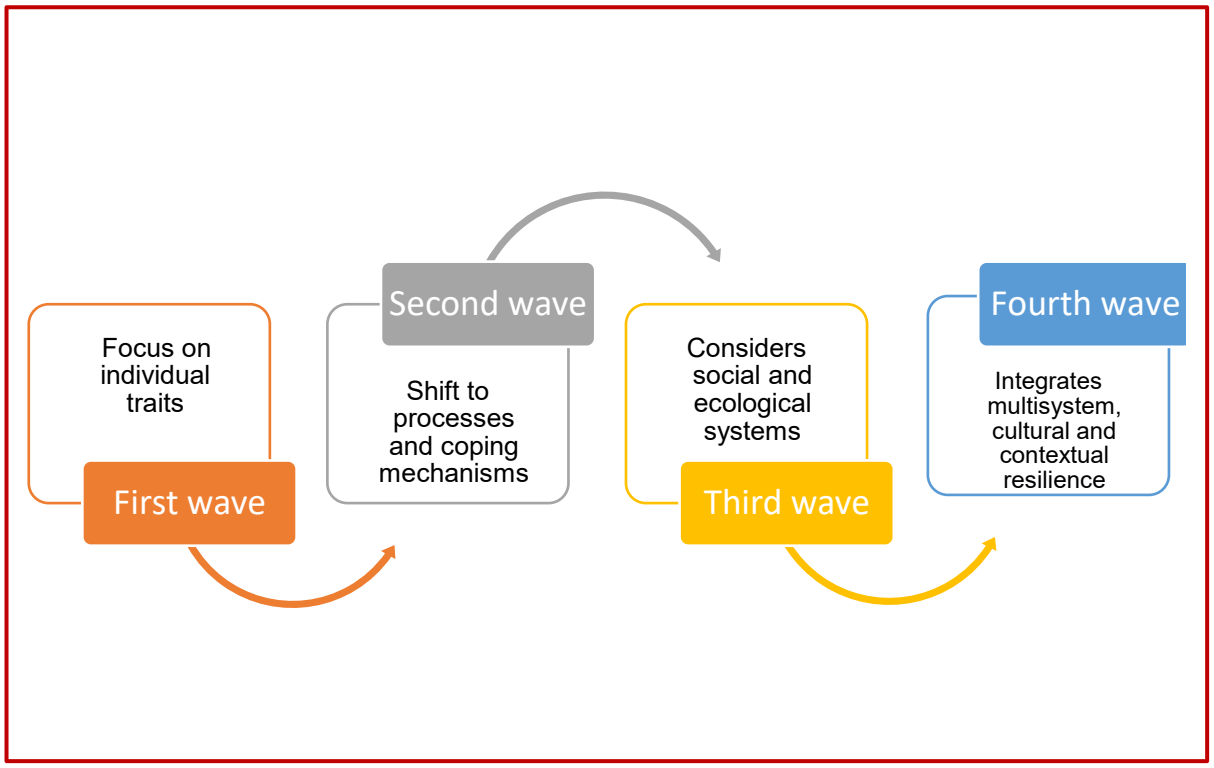


Figure 2.2: Summary of the four waves of resilience

Source: Masten et al. (2023, p. 24-36)

2.3 RESILIENCE: A CONTEMPORARY DEFINITION IN CONTEXT

While defining resilience remains a complex task, most contemporary definitions embrace both the developmental and social-ecological perspectives, referring to resilience as a dynamic process of adaptation which involves the interaction of the individual with their environment (Stainton et al., 2019, p. 726). Implicit within this notion are two critical conditions, which are highlighted in most definitions of resilience as a process: first, that exposure to adversity must be present; and second, that despite exposure to a threatening contextual risk, there must be positive adaptation (Grygorenko & Naydonova, 2023, p. 79; Masten, 2001, p. 228). In other words, the two defining elements indicate that resilience can occur only in the presence of adversity and difficult life circumstances and is manifested when an individual demonstrates healthy functioning despite these difficulties (Bonanno et al., 2025, p. 583; Ungar, 2021, p. 3). The developmental perspective also suggests that resilience is an integrative concept that evolves over time and is influenced by changes in the individual's life context.

A third condition preceding the resilience criteria is the availability of culturally appropriate, multilevel protective resources attributed to the family, school, and community (Masten, 2018, p. 22; Terrana & Al Delaimy, 2023, p. 734). This condition stems from the social-ecological perspective, which is the dominant framework for understanding resilience today. Rooted in Bronfenbrenner's bioecological systems theory (1979), this perspective positions resilience as both an internal process and a transactional exchange between an individual and his or her social ecology (Masten, 2006, p. 49; Ungar, 2010a, p. 423; Ungar et al., 2019, p. 618). Thus, for resilience to be fully realised, the presence of multilevel protective factors in the individual's life is equally important, as these factors are crucial to the resilience process.

Windle (2011, p. 157) highlights the level of competence of these resources in mitigating the effects of adversity and facilitating the resilience process. In this regard, competence can be understood as the capacity or motivation for, or the process of, effective adaptation, and as the ability to enable adaptive use of resources within and outside the person. It is based on the perceived effectiveness of adaptation and arises from interactions with the environment (Mahdiani & Ungar, 2021, p. 149).

Based on analysis of newer resilience definitions, which place context and culture at the forefront of resilience theory, Panter-Brick (2021, p. 362) asserts a culturally relevant definition of resilience as "a process to harness resources in order to sustain well-being". This definition articulates and enunciates critical attributes that may reflect resilience in culturally meaningful ways for adolescents—firstly, describing resilience as a 'process', secondly, applying the phrase 'harnessing of resources', and thirdly, emphasising the expression 'sustained well-being'. The description of resilience as a process implies that it is not just an attribute or capacity, but rather achieved through repeated trials or events which prompt positive adaptation. In addition, applying the phrase ' harnessing resources' enables one to identify contextually and culturally relevant resources for individuals, which promote resilience.

Furthermore, the expression of a sustained well-being suggests that resilience extends beyond just a narrow definition of health and the absence of psychopathology. Viewing resilience from a unique perspective of individuals within their social ecologies, Ungar (2008, p. 225) validates the meaningfulness of context and culture in defining resilience, stating that "resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways". Findings from the International Resilience Project demonstrate that resilience reflects both universal and culturally specific processes and must be interpreted within cultural and contextual systems. Applying Western criteria to non-Western groups risks misinterpreting

strengths and obscuring culturally grounded pathways to well-being (Ungar, 2008, p. 233; Ungar et al., 2019, p. 616).

Therefore, resilience cannot be understood as a uniform construct. Instead, positive adaptation is shaped by how cultural ecologies enable or constrain access to developmental resources. As Ungar et al. (2019, p. 616) argue, resilience emerges through interactions between individuals and environments that optimise development, meaning that adolescents' capacity to cope is inseparable from the social ecology's capacity to provide culturally meaningful support.

Given these considerations, this study adopts Ungar's (2008, p. 225; 2019, p. 616) SERT as its guiding framework. This perspective recognises that resilience extends beyond individual traits to include the processes by which adolescents navigate and negotiate for resources, as well as the ways in which families, schools, communities, and cultures make those resources available.

2.4 THE PROCESS OF RESILIENCE

As stated before, resilience is neither a fixed state nor the result of an individual personality trait or ability. Rather, resilience is understood as both a process and an outcome that is adaptable, dynamic, and vastly influenced by environmental interactions through a series of systems across many levels (Bush & Roubinov, 2021, p. 36; Sisto et al., 2019, p. 2). As such, the dynamic nature of these processes, through one's interaction with their environment over time, serves as a function of development and moulds regulatory capacity (i.e., resilience) (Masten et al., 2021, p. 29).

This understanding of resilience as a multisystemic construct is supported by Bronfenbrenner's bioecological systems theory (1989; 2005) and Ungar's social-ecological approach (2012), which emphasises that development emerges through reciprocal exchanges between individuals and their nested ecological systems. These systems range from immediate contexts such as family, peers, and schools to broader cultural and societal influences (Antony, 2022, p. 246; Bush & Roubinov, 2021, p. 37; Elliot & Davis, 2020, p. 1128).

Within this social-ecological framework, resilience is initiated when an individual experiences significant stress that disrupts their usual state of equilibrium, placing them in a state of disequilibrium (Antony, 2022, p. 247; Theron et al., 2022, p. 1; Vella & Pai, 2019, p. 234). Once the individual experiences disruptions to his/her development and no longer feels 'well' or 'OK', an imbalance occurs, and the process of resilience takes place. It is important to note, however, that resilience is not experienced in the same way by all individuals. For instance, what one individual may experience as minor stress, another might experience a similar

encounter as major stress. Changes in the individual's environment and the availability of resources influence the resilience process (Stainton et al., 2019, p. 727; Ungar, 2021, p. 7).

Next, the social ecology (environment) plays a significant role in the resilience process as it provides numerous protective resources that can contribute to and enhance an individual's potential for resilience (Li et al., 2018, p. 128; Ungar, 2021, p. 8). Risk factors occur within the context in which the individual is growing up. Within this context, the negative influence of risk and protective resources in the individual's social ecology (i.e., family, school, peer groups and community) interact. The interaction between risk and protective resources is adaptable and fluctuates over time according to circumstances, and is specific to the individual, context, and culture (Stainton et al., 2019, p. 727; Ungar, 2011, p. 7, 2019, p. 2). For instance, an adolescent with LD in a mainstream school has resources available within their social ecology that could potentially assist them. These resources may include interactions between the adolescent and their parents, as well as the student and their teacher or therapists. Sameroff (2010, p. 16) referred to these interactions between the adolescent and the social ecology as "transactions" or a transactional-ecological process, whereas Ungar (2010a, p. 6) more specifically refers to this dynamic transactional exchange between the adolescent and their ecologies as a process of "navigation and negotiation".

Then, the individual interacts and transacts within their social ecology or environment for adaptation (Kuldas & Foody, 2021, p. 6; Theron et al., 2022, p. 2). In other words, the individual and the environment influence each other reciprocally. Given that this is a dual process of navigation and negotiation, the resilience process entails that the individual directs his or her path towards accessing resources and support for these resources to their well-being. At the same time, their social ecologies respond positively to these actions by providing support, making resources available or negotiating for resources in culturally meaningful ways (Ungar, 2008, p. 225; Ungar et al., 2019, p. 616). In this sense, for example, an individual with LD navigates towards resources that may help them cope with challenges by approaching a parent or teacher, who will then negotiate support for these resources through therapy. This reflects a give-and-take between the adolescent and their social ecology, suggesting that resilience-promoting resources are available and accessible.

The process of resilience relies on the individual's capacity and actions towards sustaining their well-being. Thus, apart from the external resources, the individual's internal resources (Ungar, 2015, p. 4) need to be utilised to buffer against risk. Internal resources of the individual pertain to any spiritual, cognitive, social, behavioural, physical or emotional strengths or competencies required for the individual to be successful in their development in different tasks, across different contexts and different cultures (Kuldas & Foody, 2021, p. 7; Ungar, 2008, p. 221, 2010b, p. 5).

Lastly, through resilience-promoting transactions, the individual develops a range of coping skills over time to manage stressful situations in an ever-changing environment. The acquired skills or processes assist the individual in successfully coping with his or her challenges and in continuing optimal functioning despite perceived risks (Ungar et al., 2019, p. 620). For example, a teacher demonstrates organisational skills to an adolescent with LD, enabling the adolescent to sequence and manage everyday tasks more easily. In this way, the adolescents make the most of these skills to cope resiliently with the challenges they face.

Ultimately, a positive outcome is achieved, enabling the individual to cope effectively. Resilience may be observed when the individual exceeds expectations and demonstrates healthy functioning (Ungar, 2021, p. 4). A positive outcome after adverse experiences suggests that resilience is also predictive of healthy functioning later in life (Booth et al., 2022, p. 2). Figure 2.3 below illustrates the dynamic, adaptive process of resilience, followed by an overview of risk factors.

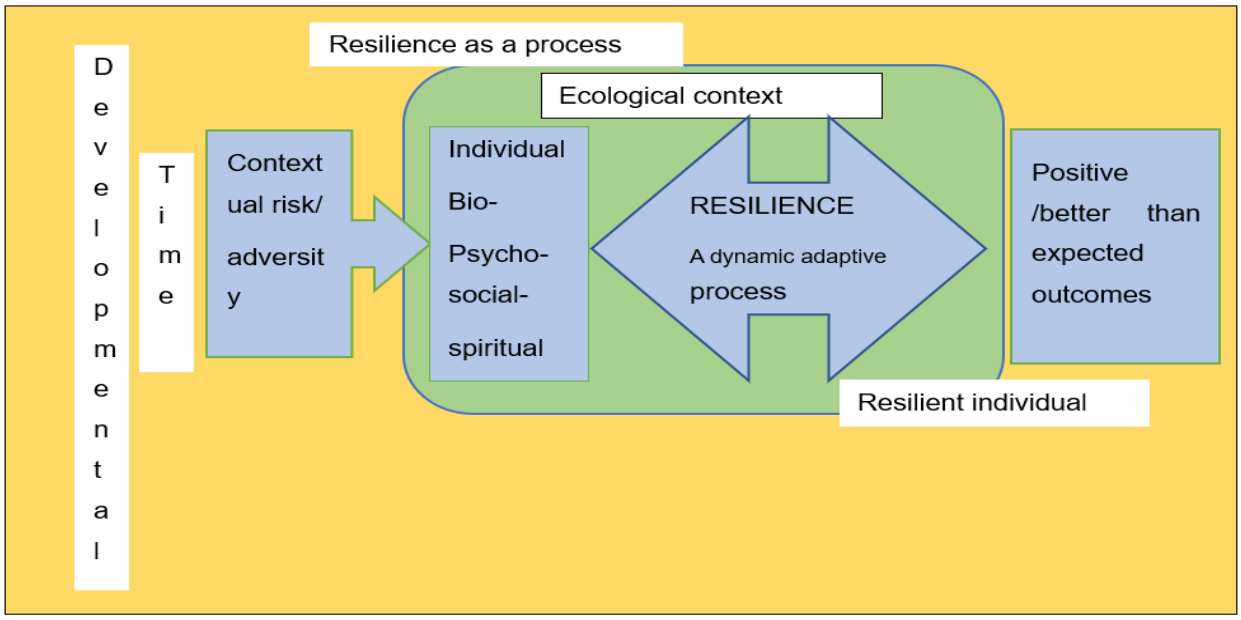


Figure 2.3: The dynamic process of resilience

Source: Adapted from van Breda (2018)

2.4.1 Risk factors

Resilience may only occur in the presence of significant adversity or risk (Pearson et al., 2025, p. 441). Risk can be defined as any characteristics, traits, situation or adverse experiences that increase an individual's chance of developing unfavourable health or behavioural outcomes (Bertsia & Poulou, 2023, p. 3; Rutter, 2023, p. 123). Southwick et al. (2014, pp. 1–2) state that severe adversity can be a result of exposure to several stressors, including, but

not limited to, interpersonal violence, emotional or physical traumas, and other corporeal accidents. Intense, chronic stressors such as bullying and harassment, economic constraints like poverty, dysfunctional relationships, and the effect of environmental challenges such as difficult weather conditions may also negatively impact individuals, which in turn brings about numerous unfavourable health outcomes.

As an individual reaches the formal operational stage of development (i.e., adolescence to adulthood), the likelihood of vulnerability to adversity and risks increases considerably (Bandeira et al., 2023, p. 11; Bonnie et al., 2019, p. 38). Risks arise from both internal and external sources. Internal risk factors include individual characteristics such as negative emotional states, maladaptive behaviours, or barriers to learning (e.g., writing difficulties). On the other hand, external risks stem from family dynamics (e.g., conflict or neglect), community contexts (e.g., limited resources), and broader societal challenges (e.g., discrimination or instability) (Admadeli & Embu-Worho, 2021, p. 225). Together, these personal, familial, and environmental influences interact to shape developmental pathways.

Risk factors are also dependent on the context, culture, and the adolescent's individual circumstances. In other words, risk factors are characterised differently across different cultures and groups of people. What constitutes "risks" in one cultural setting may be perceived differently in another. Rutter (2023, p. 124) asserts that there are causal, mediating, and moderating risk factors which need to be considered, as not all identified putative risk factors constitute a risk in all circumstances. For example, while authoritative parenting is frequently identified as a risk, it is actually only deemed a risk when there is maltreatment or abuse. Consequently, the discord can be identified as a *causal risk* factor that contributes to the risk, not solely the parenting style. As such, in some cultures, strict parenting is seen as a symbol of care and good upbringing of the child, while in others it is viewed as intrusive (Hornor, 2017, p. 385). Similarly, socioeconomic status does not directly predict negative outcomes but acts as a mediating factor through associated conditions, such as reduced access to healthcare or educational opportunities (Hornor, 2017, p. 387; Rutter, 2023, p. 125).

These distinctions highlight the importance of assessing risk within an adolescent's specific social, cultural, and developmental context. Individuals experience and interpret adversity differently, so their pathways to resilience will differ as well. Understanding the culturally informed nature of risk is therefore essential for identifying how adolescents, particularly those facing learning or writing challenges, mobilise adaptive resources within their environments.

Table 2.1 (see overleaf) provides a summary of common risk factors, adapted from Bozzini et al. (2021, p. 210); Ebersöhn et al. (2015, p. 242); Hornor (2017, p. 285); and Hall and Theron (2016b, pp. 50–51).

Table 2.1: Summary of risk factors to adolescent development

Intrapersonal risk factors	Interpersonal risk factors
Negative emotional states: • Despair • Anger/aggression • Rebelliousness • Bereavement • Worry • Despair • Anxiety/fearfulness Signature limitations: • Negative self-concept • Substance abuse • Sexual risk behaviour • Antisocial behaviour/risk-taking actions • Lack of motivation and confidence • Limited interests/hobbies • Lack of determination and self-efficacy • Developmental challenges • External locus of control Barriers to learning: • Intellectual disabilities (difficulty reading, writing, speech and language difficulties) • Mathematical challenges • Ineffective study/learning habits • Ineffective interpersonal skills • Attention deficit/hyperactivity	Family: • Unemployment/Low household income • Parental illness (disability/mental/HIV/AIDS, etc.) • Loss of a parent • Maltreatment and abuse • Neglect • Domestic violence • Household alcohol/drug abuse • Family violence/conflict • Poor attachment bonds • Additional responsibilities (e.g., child-headed household) Community: • Poverty • Unstable community • High levels of societal illiteracy • Crime/gang violence • Lack of access to basic services (typically health and welfare) School: • Ineffective school programmes due to resource scarcity • Dysfunctional school climate • Poor academic achievement • Low motivation • Regular absenteeism • Stigmatisation due to disability/challenges • Poor discipline/absenteeism • Peer rejection Globalisation: • Immigration • Refugees • Natural disasters • War/political unrest

Source: Adapted from Bozzini et al. (2021, p. 210); Ebersöhn et al. (2015, p. 242); Hornor (2017, p. 285); and Hall and Theron (2016b, pp. 50–51)

The following section provides insight into the protective resources that increase resilience capacity and minimise risk.

2.4.2 Protective resources

Protective resources are seen as variables that buffer against and mitigate the impact of risk on an individual's life to reduce the potential for negative outcomes (Bandeira et al., 2023, p. 4). Protective resources, however, do not only help reduce risks, but also facilitate and encourage positive behaviour and social development. Resources which are present and available within the social ecology mediate the effects of adversity and enable an individual to successfully embrace positive adaptation in contextually and culturally meaningful ways (Ungar et al., 2019, p. 2). This is not one-dimensional; rather, the various resources correlate and complement one another through their interaction with the setting in which they appear. In other words, the bidirectional flow of resources may mitigate the effects of risk to a minimal level or even eliminate some risks.

Vaughn and DeJonckheere (2021, p. 130) posit that while the effects of a particular risk can be neutralised, protective factors can only implicitly help to shield the individual from subsequent risks by consistently employing adaptive coping strategies. In other words, coping strategies are significant to resilience and serve a critical function in the ongoing dynamic process, which is prone to changes in response to the fluctuating demands of stressful life situations. Cicchetti (2010, p. 145) and Goldstein and Brooks (2013, p. 10) point to multifinality[1] and equifinality[2] in development processes, asserting that the ways in which individuals respond and interact with risk and protective factors at different levels of their social ecology (i.e., family, community, and culture, and the interactions between these environments), determines whether individuals inhibit adaptive or maladaptive developmental outcomes (Masten et al., 2023, p. 29) For example, adolescents with LD may begin on the same major developmental trajectory, yet experience very different developmental outcomes. For example, an adolescent who navigates towards and negotiates (showing competence through individual characteristics) for protective resources that might strengthen him/her to cope better, by approaching members in his/her social ecology (i.e., teachers at school, parents or school-based professionals) requesting help, may experience positive developmental outcomes. Whereas, an adolescent residing in a resource-constrained community may encounter disapproval to a plea for help due to insufficient protective resources and support

[1] For describing future developmental pathways, multifinality refers to a process where a similar circumstance (e.g., level of behaviour, presence of disability) results in multiple pathways that lead to different outcomes. While, in describing prior pathways to an observed state, multifinality denotes that differences in a given circumstance may be the result of a shared past experience.

[2] For describing future developmental pathways, equifinality can be understood as a number of initial, different pathways that lead to the same outcome. While, in describing prior pathways to an observed state, equifinality means that a given observed circumstance may be the result of varying past experiences.

(uncaring and ignorant communities regarding disability) to help, thus resulting in unfavourable developmental outcomes, which could include the development of a mood disorder (e.g., depression/anxiety). To be resilient, the adolescent needs negotiation to ensure support is reciprocated. The physical and social ecologies of the adolescents (including familial and environmental processes) as well as individual processes need to work together to navigate towards resilience and negotiate in culturally meaningful ways to sustain well-being (Ungar, 2021, p. 9).

While individual traits play a pivotal role in the resilience process, they are not a prerequisite for it (Leys et al., 2020, p. 3; Theron & Van Breda, 2025, p. 3). Resilience theory has shifted from viewing stressors and risk factors as pathogenic and requiring intervention. However, it now focuses on the individual, the context of development, such as the school, processes, and social interactions, that promote healthy and positive developmental outcomes (Ungar et al., 2019, p. 2; Twum-Antwi et al., 2020, p. 79).

Gaining insight into protective resources and the nature of their interaction creates a bigger picture of what it means to build resilience. Bronfenbrenner (1989) described the bioecological systems theory as placing the individual at the centre of the systems that impact adolescent development. Adolescents with LD are influenced, which, in turn, influences the events around them. Hence, such interactions between the adolescent as a developing person and the context(s) of development are best represented by Bronfenbrenner's ecological framework, across five levels (i.e., the micro, meso, exo, macro, and chrono systems), which can help in depicting and capturing certain specific protective resources drawn by the adolescent from the environment.

However, for the purpose of this study, more emphasis is placed on school ecology as a microsystem. According to Bronfenbrenner (1979), the microsystem is defined as the pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with physical and material characteristics. Protective resources can be identified as individual characteristics, such as interpersonal strengths including personal skills, temperament, and genetic qualities; family qualities, for example, a caring parent; as well as factors in the external environment, such as support from the school and religious affiliations (Bertsia & Polou, 2023, p. 4; Ronen, 2021, p. 357). In the section to follow, individual capacities and competencies promoting resilience will be discussed.

2.4.2.1 Individual capacities and competencies promoting resilience

Coping is an integral part of the resilience process in which individuals overcome adversity and avoid negative life outcomes in the face of risk (Friedberg & Malefakis, 2022, p. 384; Van der Hallen et al., 2020, p. 479). Studies report on **coping skills** as a resilience-building

intrapersonal dimension that enables or enhances adaptation (Friedberg & Malefakis, 2022, p. 384; Ronen, 2021, p. 347). Thus, a broad range of coping strategies is deemed necessary in promoting resilience. Coping strategies refer to any characteristics, patterns of behaviour, or efforts adolescents put forward to mobilise personal resources, which could lead to positive outcomes (Ronen, 2021, p. 347; Van der Hallen et al., 2020, p. 479). Protective mechanisms within the individual's social ecology aid adolescents when they face difficulties and potentially promote resilience (Theron et al., 2020, p. 4). According to Kruger and Prinsloo (2008, p. 243), individual capacities and competencies, which encompass knowledge, skills, values, and attitudes, are situated within adolescents' emotional, social, and cognitive modalities. This section focuses on capacities and competencies recognised as resilience-promoting resources, nested in the psyche of each individual, enabling them to overcome threatening life situations.

In a study of rural Basotho youth living in the Thabo Mofutsanya district in the Free State Province of South Africa, Theron et al. (2013, p. 75) highlight the significance of intrapersonal traits and skills that promote positive adjustment through acceptance of hardship. Possessing an array of skills and traits is believed to encourage adolescents with a strong mindset towards resilience. The phrase “to bend under difficulties, but not to break” was used to promote this mindset and support adolescents in negotiating for resources that enable them to adjust positively.

Similarly, a study by Marks et al. (2020, p. 154) examined the role of personal identity (i.e., ethnic and cultural) in fostering resilience. Developing a **personal identity** is a critical developmental task that needs to be negotiated to become independent individuals and navigate the changes associated with adolescence. More specifically, for adolescents of colour, possessing a strong sense of personal identity serves as a protective factor which mitigates the negative effects of risk, especially in cases of prejudice, stereotyping, violence, and racial discrimination—the significance and meaning that an adolescent attributes to their identity may be critical to their psychological well-being.

Haffejee and Theron (2019, p. 684) highlight the role of personal **agency** in resilience processes. Agency is driven by the motivation to adapt and empowers adolescents to set **goals, take action, mobilise available resources,** and succeed despite adversity (Wehmeyer et al., 2021, p. 244). An individual’s personal sense of agency is supported by a positive, optimistic outlook, an intrinsic locus of control, self-regulation/self-efficacy, and a willingness to have fun (Haffejee & Theron, 2019, p. 686).

Maintaining a **positive outlook** on life and remaining hopeful and **optimistic** can also help to mitigate the potentially negative effects of stressful situations (Masten, 2018, p. 19;

Mohammadinia et al., 2018, p. 7; Pilram et al., 2020, p. 86). An individual with a hopeful, optimistic outlook on life foresees a brighter future, has healthy expectancies and is more willing to succeed (Laranjeira & Querido, 2022, p. 1). In a study on the mediating role of hope, Ciçek (2021, p. 136) found that hope is a positive attribute associated with both psychological and physical well-being, thereby contributing to resilience. The study also suggests that positive well-being and resilience correlate with **mindfulness, happiness, life satisfaction, and positive affect**.

Imperviousness is also closely associated with resilience, as it refers to a state of mind where an individual can persist through stressful events and remain uninfluenced by negative experiences, for example, being teased for having a disability. Adolescents who are impervious are also characterised by **mental toughness** and are able to withstand and bounce back from adversity by accepting the conditions of their circumstances and avoiding seeing difficulties as insurmountable problems (Ni et al., 2024, p. 2). A culturally embedded component related to imperviousness and toughness is faith. Holding strong faith in oneself enables adolescents to rise above the challenges of adversity and generates greater resilience (Panter-Brick, 2021, p. 370).

According to Masten (2018, p. 21) and Niaz et al. (2025, p. 712), another promising internal factor that contributes to the development of high levels of adolescent resilience is **self-regulation**. Self-regulation refers to an individual's ability to manage emotions independently, make decisions by applying cognitive thinking strategies to achieve desired goals, and regulate and direct their own behaviour to cope effectively in difficult situations, thereby lowering the risk or decreasing the source of risk. In other words, having **self-determination**, the individual has the capacity to act independently and exert moderate control over their external environment (i.e., home, community, and school). These traits further relate to **self-awareness** (i.e., positive and negative affect, strengths, talents, prosocial attitude) (Roffey & Quinlan, 2021, p. 651), **self-efficacy** (i.e., self-confidence, self-control), and **self-esteem,** which also play a mediating role in the resilience process (Sagone et al, 2020, p. 883; Sheymardanov et al., 2020, p. 2319).

Intellectual abilities (e.g., creativity, cognitive strategies, metacognitive skills, and executive functions) have also been documented as resilience-promoting resources (Delhalle & Blavier, 2023, p. 2; López-Aymes et al., 2020, p. 4; Masten, 2018, p. 19; Mohammadinia et al., 2018, p. 4). The literature indicates that adolescents' intellectual abilities enable them to employ various strategies which encourage positive adjustment. These strategies include the ability of adolescents to reason and adopt a more positive view of hardship (allowing manageability of challenges), buffer against certain mental and emotional challenges (e.g., challenges in the home such as illness of a parent or poverty), exercise some control over their life situation and

show positivity, as well as learn and implement **social skills** to adapt to personal expectations and fit in with their communities (González-Moreno et al., 2024, p. 1). More specifically, **problem-solving skills** enable adolescents to be more self-determined in overcoming challenges and making informed decisions. Problem-solving further encourages planning and goal-setting skills, which are thought to promote resilient outcomes (Sagone et al., 2020, p. 883).

Adolescents with good intellectual functioning may also utilise problem-solving skills and reasoning during stressful situations (Van Breda, 2018, p. 7). More intelligent adolescents may use reasoning as a means to self-pacify, which, in turn, can help them regulate negative emotions and resolve conflict situations with others. In a study based on characteristics and components of child and adolescent resilience, it was found that **emotional intelligence** yields positive adjustment into adulthood (Ellis et al., 2017, p. 577; Mohammadinia et al., 2018). In this regard, Ellis et al. (2017, p. 577) assert that intelligence not only reflects in scholastic achievement but is also demonstrated through traditional knowledge and skills used for survival. This is particularly true for adolescent who manifest their cognitive skills and abilities through everyday life experiences, for example, herding cattle is an intelligent skill acquired through generations, which requires discipline, brings about a sense of responsibility, and creates financial stability, leading to the attainment of positive life outcomes (Pitikoe & Morojele, 2017, p. 39).

Altruism is also closely related to resilience. Altruistic behaviour stems from the motivation and desire to serve and help others without the intention of personal gain or reward (Kraut, 2020). According to Mohammadinia et al. (2018, p. 4), altruism is also associated with intellectual capacity, as more intelligent adolescents also benefit more easily from social skills acquired through engagement with parents and other prosocial adults. Altruistic adolescents often exhibit greater empathy and are more willing to offer a helping hand to others as a form of emotional gratification (Kirby, 2020, p. 6).

Another individual capacity identified is **social competency**. Social competency implies an individual's ability to achieve social and personal goals by applying a variety of interpersonal behaviours as an independent individual. When adolescents are able to form and maintain positive relationships with others (i.e., parents, peers, teachers, members of the community), develop and practice effective communication (i.e., learning, recognising, and interpreting social cues, and implementing suitable responses), and work effectively with others, their social competency is encouraged (Priyadarshini & Jose, 2025, p. 2). Adolescents with mature social competence also appear **attractive** to others (Dampney-Jay & Pluess, 2026, p. 5). An **enthusiastic** disposition attracts the support of peers, teachers, and other caring adults and,

in turn, also improves self-esteem and self-efficacy (Mohammadinia et al., 2018, p. 5; Priyadarshini & Jose, 2025, p. 2; Van Harmelen et al., 2017, p. 2318).

Possessing a special talent, skill, creative interest, or hobby further contributes to resilient functioning (Morris et al., 2024, p. 892). According to Ellis et al. (2017, p. 577), individuals experiencing stressful life situations may show signs of adaptation through 'hidden talents' which enable them to achieve their full potential. In other words, adolescents who are given the opportunity to demonstrate or develop a unique talent and are appreciated for their creativity may build resilience, cope better, and improve their well-being (De Lorenzo et al., 2023, p. 2). In a study by Ibraeva et al. (2025, p. 12) on building resilience through performing arts, the researchers found that involvement in extracurricular activities, including performing arts and visuals, may help adolescent learners with LD and mental health challenges express difficult emotions and provide them with a sense of belonging, which led to resilient outcomes and improved well-being.

An internal locus of control refers to an individual's belief about the extent of control that they have over things that happen to them (Arsini et al., 2023, p. 399; Li et al., 2018, p. 1). Like other psychological constructs, such as agency and self-efficacy, locus of control is positively associated with resilience, allowing adolescents to perform better socially and academically (Arsini et al., 2023, p. 399). Having a greater internal locus of control prevents an individual from feeling helpless. Thus, the threat of a risk situation is lessened, as the individual feels more competent in their ability to cope (Adak & Sarkar, 2023, p. 2). It has also been found that individuals who engage in **self-reflection** through self-insights (i.e., reflecting on one's own thoughts, behaviours and feelings) and introspection are better able to process their thoughts and make sense of difficult situations. This practice enables them to address personal problems and negative feelings, which, over time, improves their subjective well-being (Mertens et al., 2022, p. 503).

Another protective resilience-enabling resource is **assertiveness** (Grossman, 2021, p. 298; Shouhani et al., 2022, p. 49). Assertiveness is regarded as a social skill that fosters resilience through assertive beliefs and behaviour, helping adolescents view themselves more positively and build self-confidence. Adolescents who are assertive have higher self-esteem and are able to stand up for themselves in a manner that is appropriate, despite their difficulties and/or intimidation from others (Shouhani et al., 2022, p. 44). Being assertive leads to **autonomy**, which enables adolescents to communicate their feelings, use reasoning, and make independent decisions while still appreciating their dependence on significant role players (i.e., parents, caregivers, teachers) in their lives (Martino et al., 2019, p. 14).

An **easy-going or sunny temperament** has been identified as a characteristic which helps mitigate the effects of stressful situations (Echezarraga et al., 2021, p. 2). Individuals observed to have a sunny temperament are typically cheerful and smiley. Thus, they are better able to handle situations and adapt to change with more flexibility (Beutel et al., 2017, p. 2). According to Sharma and Kaur (2020, p. 68), adolescents who are easy-going and have a positive temperament are better able to respond to change, find comfort after stress, and maintain physiological equilibrium. They may even appear more amicable and elicit better responses from adults, including those who are not necessarily parents/caregivers.

Having a **sense of humour** is a characteristic which also contributes to resilience (Kaya & Yagan, 2022, p. 148; Kennison, 2022, p. 667). A sense of humour has a positive effect on individuals, as it aids in stress relief and encourages favourable relationships with others in times of difficulty (Kaya & Yagan, 2022, p. 147; Sagone et al., 2020, p. 882).

Peacefulness is an individual characteristic which has also been found to be a potential resilience-enhancing resource (Arsini et al., 2020, p. 1120). Austin et al. (2023, p. 167) report that an individual with a peaceful and calm nature exhibits positive behaviours through engaging in acts of kindness and forms of good practice, for example, these individuals who have compassion for themselves and others, are forgiving, and show gratitude in their everyday lives (Ge et al., 2020, p. 398; Hanson & Hanson, 2018, p. 18).

Studies report that **a positive future orientation,** as an intrapersonal factor, guides adolescents in finding ways to improve their future, thereby encouraging resilience (Fusco et al., 2018, p. 3; Lin et al., 2024, p. 3). These scholars also point out that positive future orientation and aspirations relate to **hope** and envisioning a better future, which involves having ambitions, aims, and goals for the future. A positive future orientation holds significance in that it can mobilise appropriate social choices or suggest adolescents' determination to prevail over hardship (Lin et al., 2024, p. 5).

More potential resilience-promoting resources include good health. Being in good health also fosters resilience (Trigueros et al. 2019, p. 7). When adolescents make healthy choices, follow a healthy diet, and engage in some form of physical activity, they are in a better position to deal with stressful situations (Ploughman et al., 2020, p. 2772). Consuming healthy, nutritious foods and engaging in regular physical activity can significantly reduce stress, improve mood, and enhance overall well-being. Adolescents who are healthy and comfortable with who they are experience greater **vitality** and are more **confident** than other adolescents (Hanson & Hanson, 2018, p. 299).

It is imperative to note, however, that not all individuals who are exposed to the same risk have the same subsequent trajectories. One reason for this, in particular, is that individuals may

experience resilience differently depending on the ways in which they access and utilise personal and environmental resources (Stainton et al., 2019, p. 725; Theron, 2019, p. 327). As protective resources are embedded in and dependent on the specific context (external) and on the individual adolescent's skill sets (internal) (Mahdiani & Ungar, 2021, p. 152), the outcome may be adaptive for certain individuals, but it can appear maladaptive to others. For example, Ellis et al. (2017, p. 566) highlight an attribute, such as **self-control,** that proves adaptive for an individual living in a safe environment but may not be transparent for an individual living in an at-risk community where opportunities are minimal. It is therefore suggested that adolescents learn and advance the skills and abilities relevant to their developmental level and accessible within their social ecologies. Divergence in skills and abilities enables adolescents to deal more effectively with stress exposure[3] (Ellis et al., 2017, p. 567)

2.4.2.2 Family-related resources

Research (Stone et al., 2020, p. 242; Ungar et al., 2019, p. 618; Ungar et al., 2021, p. 11) emphasises the significance of the family as a source of resilience for adolescents during times of difficulty. According to Hall and Theron (2016b, p. 58), having a **supportive social ecology** is instrumental in championing resilience amongst adolescents. Within the African context, Theron (2019, p. 327) emphasises the **role of connectedness**, whereby adolescents are part of and have access to a support system. Connectedness not only includes formal relations with the family community (i.e., the relatives belonging to the immediate and extended family), but also transcends formal relations with other caring individuals, such as caring peers or adults (for instance, an aunt, uncle, neighbour, etc.) who may facilitate access to basic resources and can provide meaningful experiences for the adolescent. Resilience-enabling connections to a collective of supportive others provide opportunities for joint access, mobilisation, networking, and nurturing of sustained resources. Finklestein et al. (2020, p. 3) assert that these resources are present through systemic relationships. For example, in a study by Theron (2016, p. 662) on the culturally and contextually sensitive understanding of resilience from the perspective of black African young people, mothers, grandmothers, sisters, and aunts were seen to play a significant role in the resilience processes of young individuals by providing support through acts of care and nurturance. Similar studies have reported on the transactional flow of resources in a support system, whereby extended family members (i.e., aunts/uncles and cousins), caregivers, and community members (i.e., neighbours and mentors) deliver additional support (resources) to adolescents beyond that provided by the immediate family. This is then reciprocated by adolescents in the form of **taking care of others**

[3] Skills and abilities are encouraged by parents at home and reinforced by teachers at school.

(e.g., siblings), responsibly **performing household chores** (e.g., washing dishes) and supporting the community by giving back in charity or remaining committed to educational goals (Theron, 2019, p. 328). Encapsulated in the above is the **spirit of Ubuntu**, where families are embedded in a community (also referred to as the family community), while the extended family invests in the lives of the youth. This investment is regarded as a vital resource to resilience among adolescents (Simbai et al., 2025, p. 3; Theron & Van Breda, 2021, p. 2).

Research on **family structure and family systems** has shown that families are the primary source of support in developing resilience (Li et al., 2018, p. 128; Theron & Van Breda, 2021, p. 2; Theron & Van Rensburg, 2020, p. 92). Apart from the emotional support which individuals receive, scholars have reported on the significance of **identity formation,** which is encouraged through **belonging to a group of caring adults**, allowing adolescents to access contextually and culturally relevant resources within their environment (Shirima et al., 2024, p. 3). **Supportive adults and positive family interactions** are a dominant resilience enabler, particularly when adolescents form adaptive identities, which prove favourable for physical and psychological adjustment.

According to Madhavan et al. (2017, p. 1903), having a family role model in the unit who displays resilience through collectivist beliefs and values, passed down through generations as they transition to adulthood, may enhance adolescent resilience. **Role-modelling** is a powerful resilience enabler that can influence adolescents' positive development by shaping the values and ways of being they adopt as they transition to adulthood (Krisbergh, 2020, p. 7). In a study by Stone et al. (2020, p. 241) examining the racial and gender identities of Black and Latin youth in relation to resilience, it was found that mothers, grandmothers, aunts, and sisters were important role models in **strengthening resilience**. In similar studies, Madhavan et al. (2017, p. 1894) found that mothers and grandmothers are key sources of support in the lives of young people and are important role models. While female family members have been identified as more significant role models for adolescents, male family members have also been admired for their emotional strength and ability to overcome adversity from past encounters (Stone et al., 2020, p. 250). By drawing on examples from previous and older generations, the family unit is able to support one another and work together within its social system.

Positive parent-family connections (at least one attachment bond) that provide a nurturing and caring home environment, minimise risk exposure and decrease the possibility of experiencing negative outcomes (Ebersöhn et al., 2017, p. 151; Kirby, 2020, p. 1). Alves et al. (2025, p. 9) state that protective familial resources that may compensate for emotional distress among individuals include family connectedness, parental (caregiver) presence and involvement with the school and participating in shared activities. Other aspects highlighted by Susilo (2020, p.

282) include feelings of acceptance and respect, parental expectations, a positive worldview, family traditions, and spiritual values and responsibilities within the family.

When family members offer **unconditional love, care, and support**, adolescents are better equipped to manage stressful situations, which in turn leads to a heightened willingness to strive for improvement and excel academically (Butler et al., 2022, p. 783). In addition, family members who display high self-esteem show acceptance, model positive behaviour, set high expectations for adolescents to succeed, and encourage participation in family and other activities (Krisbergh, 2020, p. 1). Bonnie et al. (2019, p. 440) posit that adolescence is a critical transition period that requires adults and/or caregivers to provide additional support to help them reach their full potential and achieve their goals and dreams. It has also been found that when parents respond positively to their child, despite challenges associated with raising a child with disability, resilience is encouraged. In other words, parents who take responsibility towards themselves, their children, and the family in general are more likely to provide support by gaining an understanding of the disability through formal diagnosis and then seeking appropriate intervention for their child through professional counselling, therapy (e.g., occupational therapy) and adjustments for learning at school and at home. Hence, parents' resilience may play a role in mediating resilience for the individual.

Parenting styles and family organisational patterns that include social skills and flexible roles/behaviours are also considered resilience enablers (Shengyao et al., 2024, p. 2; Van Rensburg et al., 2019, p. 94). Parenting style refers to the approach that parents adopt in raising their children. Research has focused on four major parenting styles: authoritarian, authoritative, permissive, and uninvolved (Aldhafri et al., 2020, p. 3). The type of parenting style parents exert influences the development of the individual, including interpersonal, behavioural, and learning aspects (Shengyao et al., 2024, p. 3). While cultural variations and ecological context play a vital role in the type of rearing style parents adopt (Aldhafri et al., 2020, p. 4), Cherian (2024, p. 381) reports that the authoritative parenting style is the most significant predictor of resilience. The authoritative parenting style (also known as the acceptance-involvement style) acknowledges the best interests of the individual through warmth, acceptance, and involvement, while also employing adaptive control measures and discipline when needed. Being reared authoritatively allows adolescents freedom of expression and self-reliance, and grants a sense of greater autonomy (Cherian, 2024, p. 381; Shengyao et al., 2024, p. 2). Other positive outcomes associated with authoritative parenting include improved school grades, more proficient problem-solving and social skills, decreased anxiety/depression, and lower engagement in misconduct.

In addition, organisational family patterns allow the family unit to function optimally by forming a connected partnership, which also permits flexibility to change. In other words, if the family

as a unit becomes aware of adversity, they are able to prioritise the hardship by addressing the most detrimental aspects first. This, in turn, enables resilience by allowing resources to be drawn upon more easily and steadily (Theron, 2020, p. 79).

Aspects of culture that contribute to resilience are typically transmitted primarily by parents. The family's belief system and spiritual practices support adolescents' resilience by providing a sense of continuity, connectedness, hope, and meaning in life (Masten, 2018, p. 21). Spiritual characteristics such as maintaining a relationship with God through prayer and rituals (e.g., meditation practices) are a resilience factor for both adolescents and their families (Chairani et al., 2019, p. 602). Parents who create opportunities to practice religion together nurture adolescents' resilience. For example, in the Christian faith, this could be through weekly Bible studies, and in the Islamic faith, a 'dhikr' (prayer in praise of God and the Prophet Muhammad, peace be upon him). The family belief system frames how the family makes sense of adversity and contextualises distress. The family unit (including siblings) is integral to resilience. Thus, when adolescents are supported with the most appropriate social-ecological resources, they are more likely to build self-efficacy and receive acceptance and added support from the community.

2.4.2.3 Community-based resources

Resilience is fostered through positive interactions with diverse people. Adolescents who share constructive bonds (attachments) with others are empowered to navigate towards and negotiate for resources required to experience good health and well-being (Theron & Van Breda, 2021, p. 3). However, supportive relationships with family and other caring adults are not the only recognised source of protective resources. The community is another potentially rich source of support that can provide resources necessary to nurture and sustain well-being (Ungar et al., 2021, p. 618). According to Isaacs et al. (2020, p. 359), a community can be described as a social system that enables the development of interrelated and interconnected relationships between its sociological components, which encompass material (shelter), psychosocial (health, well-being, and life satisfaction) and sociocultural resources (values and beliefs pertaining to social events). The neighbourhood is the broader social context in which adolescents reside with their families, attend school or a learning institution, and interact with peers and other community members (Barnhart et al., 2022, p. 3).

While many adolescents have the privilege of a family network which provides strong support to assist them in managing life's challenges, a proportion of adolescents in South Africa hail from a home environment where familial support is not sufficient or does not provide the support needed to assist them in achieving positive outcomes (Theron et al., 2022, p. 2). As

the current study focuses on the role of the school in facilitating resilience among adolescents with LD, this section will focus more on the school as a community-based resource.

Adolescents who belong to a friendly neighbourhood which is safe and secure, with low levels of violence and crime, and is abundant in resources such as access to recreational facilities (including sports clubs, youth groups, access to emergency services (including police, fire, and health care services) and opportunities for prevocational services can more easily navigate towards resilience (Pillay, 2023, p. 6; Ungar et al., 2019, p. 617).

Additionally, supportive community members and the presence of role models and mentors have been associated with positive health outcomes in adolescents. Role models and mentors are individuals who model a code of behaviour and a set of values adolescents emulate, assisting in the development of their identity (Kuperminc et al., 2019, p. 3; Madhavan et al., 2017, p. 1904). Adolescents who identify with a role model, such as a teacher, parent, school-based professional, or other caring adult from the community, demonstrate positive behaviours, receive higher academic achievement, and increased participation in physical and prosocial activities (Li et al., 2018, p. 140). Role models such as teachers are strongly associated with adolescent health-related behaviours and have a positive impact on reducing behavioural problems, substance abuse, and high-risk sexual activity, suggesting that positive role models promote and encourage better adolescent health outcomes in the long term (Guo et al., 2020, p. 2).

Furthermore, when adolescents feel safe in their environment and supported by the community, they are more willing to ask for, as well as receive, support, guidance, and advice from older, caring adults. Guidance and advice from teachers and counsellors, in particular, enables resilience as adolescents feel a sense of care and belonging (Jefferis & Theron, 2017, p. 9; Li et al., 2018, p. 133; Theron, 2019, p. 328).

Partnerships between teachers, parents/caregivers and community members also serve as resilience-enabling resources (Russell & Qui, 2024, p. 216). School-based community networks can be established to provide psychosocial and emotional support to vulnerable adolescents. As such, adolescents experiencing difficulties can receive help through **health testing, counselling,** and being given the **right medication upon diagnosis** of ill health or disability (Twum-Antwi et al., 2020, p. 82). Adolescents with barriers to learning due to physical, cognitive, or social difficulties can also benefit from **therapy**. Cognitive behavioural therapy (CBT) and occupational therapy are forms of therapy which may help adolescents reach their educational goals and overcome these challenges (Brooks & Bannigan, 2021, p. 474–475; Llistosella et al., 2023, p. 2).

2.4.2.3.1 The school as resilience enabler

School-based support is a major resource to ensure resilience (Ungar et al., 2019, p. 615). According to Brown et al. (2025, p. 1), the school environment is considered a 'safe harbour' that provides adolescents with opportunities for growth and development. This involves offering learners a healthy challenge and mission for self-development and growth, fostering positive adult and peer relationships, developing competencies and a sense of self-efficacy and providing access to social capital, mental health support, and leadership opportunities. Schools can be seen as centres of care and support not only for adolescents, but also for communities (Theron et al., 2022, p. 3).

A **safe and supportive school environment** has the propensity to mitigate the effects of challenging situations by offering multiple protective resources (Caleon & King, 2020, p. 3). Specific protective resources such as social competence, support from caring adults, school engagement, personal control and skills development, positive school experiences through meaningful participation, and communicating high expectations (Ungar et al., 2019, p. 618) are thought to promote resilience among adolescent learners. Thapa and Cohen (2023, p. 540) also highlight the role of school climate and culture in enhancing the social competence and emotional well-being of adolescent learners. According to these authors, schools that emphasise enhancing protective environmental factors are more likely to provide adolescents with growth opportunities, encompassing the behavioural, emotional, and cognitive aspects of development (Theron et al., 2022, p. 2–3). Being part of a supportive school environment which fosters social competence through positive teacher-learner relationships, peer relationships, and community social networks is fundamental to building resilience in adolescent learners (Dias & Cadime, 2017, p. 38; Mawila, 2023, p. 2). Within the school context, support from teachers and other school staff is noted as the most critical resource for adolescent resilience. School engagement not only fosters caring and supportive relationships with peers, teachers, and other adults alike but also provides opportunities for upward movement (Theron et al., 2022, p. 2).

Engaging adolescent learners in **curriculum-based educational activities** is paramount for enhancing their overall resilience. According to Cahill et al. (2019, p. 135), a school curriculum should offer opportunities for adolescents to develop both their personal and social capabilities. With regard to adolescents with intellectual disability (ID) in particular, Hall and Theron (2016a, p. 7) point out that a curriculum designed according to inclusive practices, with activities commensurate with the level of learners' abilities across all subject areas, provides them with a more positive experience of their schoolwork and capabilities. In addition, good teaching connects with the curriculum by ensuring that activities are organised and align with learners' life-worlds (Hall & Theron, 2016b, p. 56). Affording opportunities for experiential learning and setting high standards using specialised teaching methods (i.e., differentiated

pedagogy) increases engagement at school and allows learners to forge ahead despite the challenges they may face. Furthermore, it is argued that when adolescent learners form affective bonds with their teachers and other school staff, they tend to experience higher levels of academic success. Consequently, academic support and a sense of belongingness received by learners have been shown to contribute to resilience.

Peers or friendship relationships with other learners in school have also been found to be a strong predictor of resilience (Butler et al., 2022, p. 777) as they provide adolescents with a sense of belonging and unity, which contributes to a healthy self-concept (Nieuwenhuis & Veennema, 2025, p. 2). According to Furrer et al. (2014, p. 104), high-quality relationships within the classroom (i.e., learner-teacher and learner-peers) allow adolescent learners to focus better on learning and develop academic competencies, give and receive feedback, communicate effectively, and resolve conflicts, through working together and relating meaningfully to each other's experiences. By sharing similar experiences with other adolescents facing the same or similar challenges, adolescents who face difficulties realise that they are not alone in their struggles. Conversely, learners who engage with high-achieving peers, such as in mainstream schools, are likely to be motivated and emulate positive behaviours (Theron et al., 2022, p. 3). Nieuwenhuis and Veennema (2025, p. 2) further state that when adolescents can conceptualise mutual challenges, they are more likely to view their struggles as a normal and passing phase in which others support them. Consistent peer relationships can be powerful in strengthening adolescents' resilience by fostering positive emotions, feelings of worth, and overall improved psychological well-being (Chinyama et al., 2020, p. 142).

Studies also report on the role of schools in nurturing resilience for adolescents through **social support,** which can act as a protective factor for all learners (Mampane, 2020, p. 1638; Van der Wal & George, 2018, p. 237). According to Putri (2024, p. 25), social support provides emotional stability, practical assistance, and a sense of connectedness, which is crucial in helping learners overcome learning barriers and achieve academic success. In addition, Ebersöhn (2024, p. 5) highlights the concept of 'flocking' as a resilience enabler linked to social support, in which individuals respond positively to challenges by leveraging their social connectedness, demonstrating awareness of one another's vulnerability, and gathering resources. The flocking response enables individuals to offer and receive support from one another, allowing all to thrive. Additionally, the church is part of a supportive community network that can be linked to the school in providing religious education (Zellma & Makosa, 2024, p. 3). Religious members of the church and/or religious community members of different

faiths, such as pastors, priests, rabbis, and imams[4], participate in education by contributing to the content of religious studies subjects, as well as teaching it or providing support to individuals in troubled times through offering spiritual, moral, material, and social support and guidance (Thwala et al., 2019, p. 294). By studying religious subjects at school and engaging with esteemed religious members of the community, adolescents feel a sense of healing and comfort, are able to make sense of the challenges they are experiencing, and remain optimistic (Zellma & Makosa, 2024, p. 3).

2.4.2.4 Role of culture, religion, spirituality, and resilience in adolescents

In times of adversity, culture, religion and spirituality serve as a potential source of support, which is significant to adaptive coping and resilience (Mhaka-Muntepfa & Maundeni, 2019, p. 8)

Culture plays a crucial role in the development and strengthening of adolescents' resilience. According to Theron et al. (2011, p. 801), culture refers to the collective conventions, values, and practices that belong to and are endorsed by groups that are potentially mutually bound to the same cultural sphere of influence. South Africa is a country of rich diversity. According to Theron (2023, p. 1019), South Africa comprises a multicultural society with diverse racial and ethnic categories that embrace various cultural practices. This includes having a religious outlook on life, maintaining kinship ties, integrating language families, and upholding traditions and belief systems. Diversity is further portrayed through the sharing of unique worldviews concerning art, music, writing, drama, and healing rituals.

While culture has been found to enhance resilience, Masten (2016, p. 304) suggests that there is a shift in the universal, culturally sanctioned ways of enhancing resilience. One reason for this might be the incorporation of common cultural practices to support resilience, such as extended families, social support, religious structures, and ethnic social systems, in adopting cultural strategies that mitigate the effects of risk factors. Masten's argument implies the pressing need to recognise the complexities and dynamics within and between cultures. Given that resilience is understood differently across cultures, a broader research scope is required to gain a deeper understanding of the complex nuances of culture and how these can promote adaptive coping under conditions of adversity in culturally relevant ways that benefit adolescents (Masten, 2018, p. 23).

Knowledge of different cultures and the factors that promote resilience is imperative for potentially identifying culturally relevant resilience-promoting resources. An example cited by Panter-Brick (2015, p. 238) can be drawn from Palestinian Islamic culture, where the concept

[4] A title given to a Muslim religious leader

of *Sumud* (Steadfast perseverance) is strongly practised. *Sumud* is an ideological belief that translates as a collective community protective mechanism, encouraging determination and the will to live through perseverance, steadfastness, and commitment to the homeland despite adversity. *Sumud* is a collective community traditional **belief system** that enables adolescents to make sense of their struggles and cope with everyday life, thereby fostering resilience (Gilbrecht et al., 2025, p. 3). The cultural standing of resilience differs greatly across cultures, as each cultural group has culturally specific goals. In this regard, Panter-Brick (2015, p. 236) highlights that youth attach these goals to either material, social, economic, or political causes. For instance, youth in Afghanistan attribute resilience to dignity and family honour, while Palestinian youth attribute resilience to acts of social justice. This suggests that resilience encompasses moral, social, and structural dimensions that are culturally specific, essential for sustaining health and well-being.

Similarly, African communities embrace a collective **culture of *Ubuntu***, a value system that emphasises compassion, kindness, generosity, and respect for human dignity. Linked to the philosophy of Ubuntu, African culture is grounded in strong spiritual (religious and ancestral) beliefs and ties of kinship as collective traditional beliefs and practices (Van Rensburg et al., 2019, p. 95). Ubuntu is understood as 'a way of being' whereby individuals fit in as part of the larger community that empowers individual self-realisation. The teachings of Ubuntu are based on the esteem for the inherent dignity and goodness of all human beings, as well as respect for human interdependence. Cultural traditions, spirituality, and religion are also inherent in Ubuntu (Ajitoni, 2024, 5). Summarised in the maxim "I am, because we exist", Ubuntu, with the broader aspects of connectedness and an individual's cultural heritage, is identified as a valuable source of resilience for some adolescents (Van Breda, 2018, p. 8). As a collective way of living (extending beyond the immediate and the extended family and encouraging social capital), Ubuntu teaches adolescents about spirituality and religion. In line with this, adolescents are encouraged to participate in traditional practices and are also equipped with reciprocal social skills. More specifically, in the Sesotho culture, adolescents are further encouraged to pursue an education, which can benefit not only themselves but also the community at large (Van Rensburg et al., 2019, p. 95). While it has been pointed out that Ubuntu has suffered a significant decline in recent years due to cultural pluralism brought about by globalisation and technological advancements, respect for the values of Ubuntu can still be revived and upheld to encourage adolescents' resilience (Ajitoni, 2024, p. 10).

These findings suggest that an adolescent's culture, religion, and spirituality have the potential to help them make sense of difficult experiences and view challenges as opportunities to enhance resilience rather than as threats that could lead to maladaptive coping. One of the most noted in this regard is the church, which serves as both a spiritual resource and a social

support system (Wijesekara, 2019, p. 23). Being part of a religious group or organisation provides adolescents with the opportunity to pray and feel close to God. Emphasising personal devotion brings about a sense of belonging and may lead to greater positive adjustment, thereby fostering resilience.

Spiritual or religious beliefs and practices are central to culture. According to Howard et al. (2023, p. 178), spirituality can be defined as a universal phenomenon which is biologically inherent, distinct, and understood as an integral part of human existence. Spirituality is believed to be a life-long process (centred around morals and values) which emerges in childhood and develops over time as a form of natural awareness through which an individual finds purpose and acquires meaning-making, while religion involves beliefs, practices, and rituals related to the *transcendent* (i.e., God, Allah, HaShem, or a Higher Power) (Varghese, 2024, p. 2197). Religion plays a significant role in the coping process as it serves as a framework for interpreting and coping with the demands of stressful situations and for initiating a search for meaning and purpose in adverse events (Roszak, 2025, p. 2). Religion and spirituality nourish one's faith and encourage meaning-making in age-sensitive ways, serving as a source of strength and comfort when facing difficulties. Prayer and worship, and the resources offered by religious practices, enable resilience (Sekgobela, 2025, p. 1).

Living by a **moral code** serves as a buffer against negative experiences and provides support for adolescents in difficult times. For example, most religions emphasise the belief in God or a Higher Power, reading and living by the holy books and scriptures (e.g., Bible, Quran, Hindu scriptures, etc.), obtaining peace through various forms of worship, as well as attending religious ceremonies and performing religious rituals, which increases self-esteem by relying and trusting in God (Hermán, 2023, p. 69; Mohammadinia et al., 2018, p. 4). Mohammadinia et al. (2018, p. 4) also suggest that **belief in the divine power** promotes psychological and mental health benefits as well as encourages adolescents to be hopeful and maintain positive thinking, to enhance adaptive coping in times of difficulty. Other processes by which religion and spirituality may also provide resilience include **sensitivity towards others, kindness and empathy, secure attachment relationships, personal growth and development opportunities, and social support** (Masten, 2018, p. 21; Mohammadinia et al., 2018, p. 7).

It is reported that adolescents who lean towards religiosity not only tend to display self-regulation and relate better to school, family and friends, but also recover more quickly from adversity than their counterparts who are not religiously inclined (Roszak et al., 2025, p. 3). Furthermore, adolescents with religious affiliation experienced more life satisfaction through prayer and intercession, rituals, meditation strategies, Bible reading, and congregational gatherings at the church. Religiosity is also found to potentially impact life satisfaction through

family harmony and interdependence (e.g., Ubuntu values), depending on the specific cultural group (Sekgobela, 2025, p. 10).

Mugeere et al. (2020, p. 13) report that having a personal belief system helps adolescents to cope better with difficulties, which also has a positive effect on behaviour. Following a belief system allows adolescents to be more well-grounded and less likely to engage in misconduct such as drug abuse and deviant behaviours. Thus, it can be inferred that religion and spirituality serve to enhance adaptive coping, thereby facilitating resilience. In summary, belief in the divine power, guidelines for moral conduct, close familial bonds/attachments, social support systems, and the internal and external attitude and experiences of adaptive coping are all significant to the resilience process.

2.5 CONCLUSION

This chapter introduced the construct of resilience and provided an extensive discussion of its origins and the research conducted on resilience, leading to the identification of the four waves of resilience research. The concept of resilience encompasses the ability to bounce back and achieve positive developmental outcomes in the face of adversity, acknowledging the importance of accessing both internal (i.e., individual traits) and external (i.e., familial, environmental, and cultural) resources as part of the resilience process. To achieve resilient outcomes, the environment in which the adolescent interacts continually and reciprocally must make resources available so the adolescent can navigate towards them by applying his/her internal resources (Ungar, 2015, p. 6; Ungar, 2019, p. 2). The ecological perspective on resilience suggests that while individual and family resources contribute to resilience in adolescents, external resources, such as schools, play a central role in promoting resilience. Thus, teachers, school policies, and other subjects and symbols within the school ecology play a significant role in promoting and forging pathways to resilience, particularly for adolescents with disabilities and writing difficulties.

The next chapter focuses on writing difficulties, situated within the broader spectrum of SLDs, and particularly associated with dysgraphia. It will focus on the conceptualisation and categorisation of writing difficulties, paying attention to their manifestations and impact on adolescents. In addition, the chapter examines the role of targeted support for adolescent learners experiencing writing difficulties, framed through the lens of Bronfenbrenner's ecological systems theory.

CHAPTER 3

SUPPORTING ADOLESCENT LEARNERS WITH WRITING DIFFICULTIES: A RESILIENT PATHWAY

The content of Chapter 3, along with the relative positioning of its topics, is depicted graphically in Figure 3.1 below.

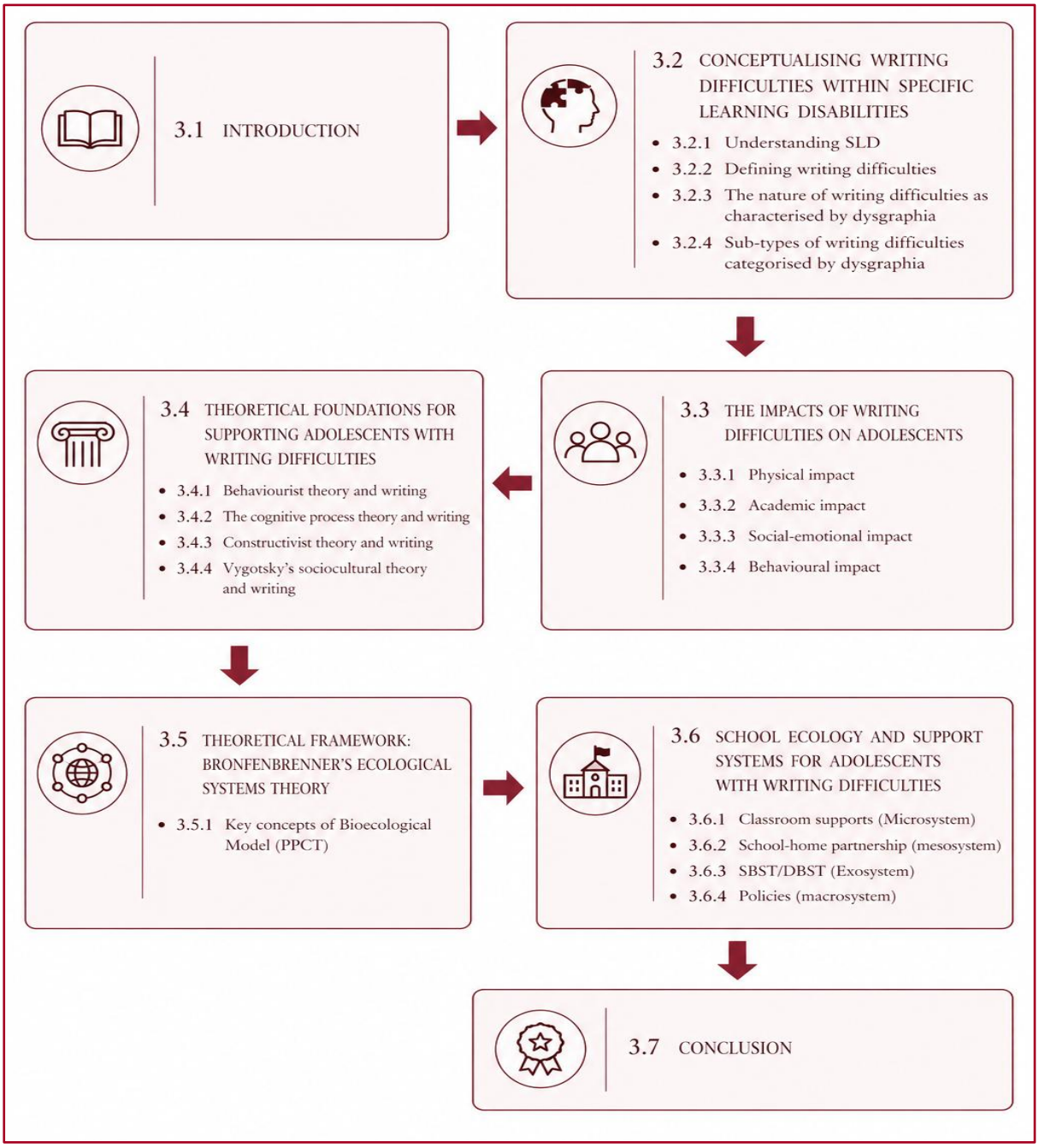


Figure 3.1: Overview of Chapter 3

3.1 INTRODUCTION

Writing, often described as “language by hand”, is a complex skill integrating cognitive, motor, and social processes, and its acquisition is more demanding than reading, extending into adolescence (Hopcan & Tokel, 2021, p. 3968). For learners with SLDs such as dyslexia, dysgraphia, dyscalculia, and dyspraxia, writing difficulties intensify during adolescence, affecting transcription, executive functions, and working memory, and often persist into adulthood (Hen-Herbst & Rosenblum, 2019, p. 6; Sheymardanov et al., 2020, p. 2318; Soto et al., 2021, p. 794). These challenges compromise academic participation, confidence, and resilience, with inadequate school support exacerbating cycles of frustration and underachievement (Brady et al., 2021, p. 223; El-Deen Hafez & Khaled, 2022, p. 1).

Despite this, research examining writing difficulties among adolescents and the role of school ecology in fostering resilience remains notably absent, with much of the existing literature focusing on related concepts, such as dysgraphia and disorders of written expression, originating predominantly in Global North contexts. Hence, this literature review aims to address this gap by highlighting writing difficulties and foregrounding the school ecology as a central environment of influence and resilience in the lives of adolescents experiencing such difficulties. This chapter discusses the nature of writing difficulties and their implications for learners with SLDs. It explores the conceptualisation, classification, aetiology, and risk factors associated with writing difficulties, reviews learning theories relevant to supporting adolescents, and outlines school-based strategies for fostering resilience and improving educational outcomes.

3.2 CONCEPTUALISING WRITING DIFFICULTIES WITHIN SLDs

SLDs represent a heterogeneous group of neurodevelopmental difficulties that interfere with the acquisition and use of reading, writing, and mathematical skills (Peterson et al., 2021, p. 466–469). Although writing difficulties are not categorised as a separate diagnostic category, they fall under the Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-5) category of SLD with difficulty in written expression (APA, 2013). This classification is important for this study, as it places writing difficulties into recognised diagnostic categories and recognises that they often co-occur with related conditions such as dyslexia, dyspraxia, and DCD.

3.2.1 Understanding SLD

Historically, SLDs were primarily viewed from a medical perspective, emphasising neurological deficits and individual pathology (Fletcher & Miciak, 2024, p. 54; Grigorenko et al., 2020, p. 39). However, more recent perspectives recognise that LD result from the interaction of neurobiological factors with environmental, cultural, and educational contexts (Davies & Soni,

2025, p. 234). This shift aligns with broader ecological and social models of disability, which argue that barriers within the learning environment, rather than impairment alone, influence learners' experiences and outcomes (Altin et al., 2023, p. 3).

SLD are classified using two internationally recognised systems, namely the DSM-5 and the ICD-11, developed by the American Psychiatric Association and the World Health Organisation. Both systems use umbrella terms to describe and characterise academic difficulties that relate to reading, writing, and mathematics (Sotelo-Dynega et al., 2018, p. 7; Vidyadharan & Tharayil, 2019, p. 276). Although these frameworks represent a shift from earlier approaches that depended on Intelligence Quotient (IQ) achievement discrepancies, they continue to privilege a functional, deficit-based perspective on LD (Fletcher & Miciak, 2024, p. 54; Jones et al., 2020). However, this perspective provides only a partial understanding of learners' lived experiences and is not always culturally adaptable across diverse contexts, such as those in South Africa (Walker, 2025, p. 355).

On the other hand, culturally responsive and contextually grounded understandings of SLDs emphasise ecological factors such as school environment, home literacy practices, language background, and community resources. Learners' profiles, progress reports, teacher observations, and the impact of families and the community are examples of qualitative measures that demonstrate how the school ecology shapes both identification and support (Eissa, 2018, p. 108). According to scholars such as Maart et al. (2019, p. 3) and Madiba and Malahlela (2024, p. 356), more resilient outcomes may be influenced by culturally sensitive definitions and interventions that emphasise educational access and inclusion. These approaches align closely with the South African policy framework, which adopts the U.S. definition of SLDs but specifies that a learner is only considered learning disabled when the education system fails to provide adequate support (Altin et al., 2023, p. 3).

Although the causes of SLDs are complex and still poorly understood, research generally highlights neurological and genetic factors as contributing to atypical processing of written or spoken language (Fletcher et al., 2019, p 7; Gary et al., 2023, p. 16; Grigorenko et al., 2020, p. 45). At the same time, socioeconomic, linguistic and pedagogical factors, such as poverty, multilingual learning contexts, and inadequate instructional practices, can interact with these intrinsic predispositions and worsen learning challenges (Davies & Soni, 2024, p. 236; Mazibuko et al., 2019, p. 3; Molwantoa et al., 2025, p. 3).

For the purpose of this study, the focus is not on the full spectrum of SLDs but specifically on writing difficulties within this broader category. The next section, therefore, discusses writing difficulties more directly, including their core features, classifications, and implications for adolescent learners.

3.2.2 Defining writing difficulties

There have been numerous attempts to define writing difficulties, particularly in the literature on dysgraphia, in order to increase awareness and support for learners who experience challenges with written expression (Reisman & Severino, 2020, p. 11). However, within this body of research, ‘dysgraphia’ is commonly used as a broader diagnostic term to describe persistent difficulties with handwriting and written expression.

While early literature defined dysgraphia as resulting from handwriting challenges or from causes such as head trauma, illness, or congenital conditions (Skunda et al., 2022, p. 152), later conceptualisations recognise dysgraphia as involving both motor and language-based deficits, including inefficiencies in verbal working memory progressing from phonological to orthographic memory (Chung et al., 2022, p. 239). As such, dysgraphia is widely understood as a neurodevelopmental learning disability that may occur in isolation or co-occur with other SLDs and neurodevelopmental conditions, including dyslexia, DCD or dyspraxia, dyscalculia, as well as ADHD, and autism (Ashraf & Najam, 2020, p. 1660; Chung et al., 2022, p. 240; Kalenjuk et al., 2022, p. 20; Mayes et al., 2019, p. 787; Reisman & Severino, 2020; Šafárová et al., 2021, p. 145), and may affect learners with average or above-average intelligence, resulting in diverse educational and social needs.

The classification of dysgraphia is particularly relevant in understanding the nature of writing difficulties, as adolescents diagnosed with multiple SLDs also experience writing difficulties emerging as a shared challenge that influences their school participation, learning experiences, relationships, and confidence (Borges et al., 2020, p. 2; Kalenjuk et al., 2022, p. 19).

The sections that follow describe the nature of writing difficulties and the types of writing difficulties as characterised by dysgraphia, followed by the impact of the difficulties on adolescent learners.

3.2.3 The nature of writing difficulties as characterised by dysgraphia

Writing difficulties often manifest through motor, sensory, spatial, and cognitive challenges, including letter illegibility, irregular handwriting, spelling misuse, and difficulty organising and translating thoughts into written language, which affects learners’ ability to participate in classroom activities compared to their age-level peers (Gargot et al., 2020, p. 2; Hopcan & Tokel, 2021, p. 3968; Šafárová et al., 2021, p. 145). These difficulties may limit engagement in learning tasks, hinder effective communication, and contribute to repeated academic challenges, despite adequate intellectual ability (Azri et al., 2025, p. 103). Since learners do not experience writing difficulties uniformly (Drotár & Dobeš, 2020, p. 1), individuals may have

distinct curricular, caregiving, and social needs. They may perform better in subject areas that adopt more practical learning approaches.

Writing difficulties are not always easily recognised, largely because of limited awareness in mainstream education settings and because learners do not always perform below average across all learning areas, particularly during the early school years. As a result, learners may remain unnoticed and undiagnosed, leading to insufficient support and long-term academic, emotional, and social consequences (Agamugoro et al., 2023, p. 97; Chung et al., 2022, p. 237; Kalenjuk et al., 2022, p. 20). Although writing difficulties are not directly caused by poor economic conditions or inadequate learning environments, these factors contribute to the perpetuation of LD, particularly in under-resourced communities where resilience-enabling resources are less prevalent (Mawila, 2022, p. 1).

Beyond academic participation, writing difficulties are associated with emotional, behavioural, and social manifestations that may affect learners' confidence and relationships (Dunn et al., 2021, p. 42; Kalenjuk et al., 2022, p. 28). Given that challenges with written expression persist through adulthood, learners' participation in diverse academic and social activities may be restricted, limiting opportunities to develop communication skills, task completion abilities, and social connections, which are essential for learning and resilience.

3.2.4 Sub-types of writing difficulties categorised by dysgraphia

Research categorises dysgraphia into various distinct sub-types, each characterised by specific features that influence writing performance (Azri et al., 2025, p. 104; Feifer, 2022, p. 457). According to Pankey (2022, p. 3), establishing a cohesive categorisation system helps generate a shared vocabulary among stakeholders, provides a consistent framework for reporting the incidence of writing difficulties in schools and guides the development of comprehensive support strategies. In line with this, Chung et al. (2020, p. 46–49) argue that categorisation systems are preferable and more manageable when grounded in observable clinical characteristics. However, they also caution to be mindful of certain categories which could remain invisible as they frequently coexist with or potentially mimic other SLDs like dyslexia.

Although several classification models for dysgraphia exist, there remains no single universally accepted categorisation system for writing difficulties more broadly. Therefore, this study adopts the subtypes proposed by Deuel (1995) to identify the three major subtypes of writing difficulties and better contextualise the concept within my study. A fourth category, called the 'executive subtype', has been described in more recent literature (Azri et al, 2025, p. 104; Feifer, 2022, p. 461; Friedmann & Gvion, 2023, p. 120). These subtypes are largely determined by symptomatic profiles of learners, ranging from mild to moderate, severe, or

even profound, depending on the specific symptoms and their intensity (Gargot et al., 2020, p. 3; Lopez & Vaivre-Douret, 2023, p. 2). Each of these subtypes is discussed below.

3.2.4.1 Dyslexic subtype

This classification is distinguished by poor written spelling, the inclusion and omission of spontaneously written words and sentences, and unnecessary use of capital letters and/or symbols within words. Chung et al. (2020, p. 47) explain this as a result of inefficiency in the "graphomotor loop", which is the mechanism by which orthographic memory, dealing with written letters, and phonologic memory, dealing with sounds connected to phonemes, interact.

Interestingly, although handwriting typically remains well-formed (Deuel, 1995), McBride (2019, p. 60) asserts that individuals struggling with dysgraphia, including dyslexic dysgraphia, frequently produce “relatively illegible” writing, especially when asked to compose text spontaneously. Despite their ability to accurately copy written text from a textbook or chalkboard, individuals with dyslexic dysgraphia encounter challenges with tasks that require spontaneous writing and may thus need more time to think and work through the task and make corrections.

It is crucial, however, to recognise that dyslexia and dyslexic dysgraphia represent distinct learning disabilities (Vlachos & Avramidis, 2020, p. 2) and the terminology may risk conflating these learning disabilities. The notable difference between the two is that learners with dyslexia struggle more with efficient reading-related challenges, whereas those with dysgraphia struggle more with writing-related difficulties (Ashraf & Najam, 2020, p. 1659). Since learners with dyslexic dysgraphia may demonstrate difficulties in written expression, which involves the use of written language, Chung et al. (2020, p. 47) note that this classification of dysgraphia can also be referred to as “linguistic dysgraphia”, “dysorthography”, or “compositional dysgraphia”. Chung et al. (2020, p. 47) also highlight that deficits in verbal executive functioning, working and stored memory may be linked to dysgraphia; activities such as oral spelling, drawing, and finger tapping are usually preserved in this classification of dysgraphia.

Dyslexic dysgraphia frequently coexists with ADHD and dyscalculia (Gargot et al., 2020, p. 2). Therefore, McBride (2019, p. 119) emphasises the importance of ensuring that learners experiencing this condition demonstrate conventional writing ability without encountering challenges related to pencil grip or other motor skill difficulties. For individuals with dyslexic dysgraphia, the emphasis should be on acquiring proficiency in letter names, letter sounds, and other graphemes specific to a particular text, as well as mastering spelling and grapheme patterns to enhance writing.

3.2.4.2 Motor subtype

Deuel (1995) refers to this particular manifestation as“motor clumsiness”, as individuals often experience awkward hand coordination movements that could result from low muscle tone and reduced dexterity (Azri, 2025, p. 104). According to Azri (2025, p. 104), learners with motor dysgraphia or “peripheral dysgraphia” demonstrate competency in oral spelling but struggle when asked to reproduce written text either by writing spontaneously or copying from a textbook or chalkboard. The key issue here lies in motor coordination difficulties, rather than motor weakness or involuntary movements (El-Deen Hafez & Khaled, 2022, p. 2). Notably, while learners with motor dysgraphia typically exhibit better drawing skills than those with spatial dysgraphia, they are still likely to face significant challenges with motor-skill activities involving finger tapping or finger succession because of difficulty with hand-eye coordination. El-Deen Hafez and Khaled (2022, p. 11) found that individuals with motor dysgraphia can be distinguished through observable indicators that affect their writing methods. The most prevalent signs include challenges with pencil grip, often accompanied by difficulties with fine motor skills. Among learners with motor dysgraphia, spelling is most significantly impacted.

Motor dysgraphia is often comorbid with motor acquisition disorder, DCD or dyspraxia (Gargot et al., 2020, p. 1). It is imperative to focus on the motor and visual-motor skills to better assist learners who struggle more with writing than with reading. This could include activities that involve finger and hand strength exercises, like clenching a ball or tracing with stencils (Chung et al., 2020, p. 46; George, 2020, p. 17).

3.2.4.3 Spatial subtype

The challenges associated with the spatial subtype of dysgraphia are intricately tied to difficulties in visual-spatial perception and positioning (Aremu & Adewunmi, 2023, p. 58). Learners experience difficulty writing letters and words in the correct direction (i.e., left to right), with spacing typically incorrect and sentences poorly constructed without maintaining alignment with lines or margins (El-Deen Hafez & Khaled, 2022, p. 2; Feifer, 2022, p. 457). At the core of these difficulties is the act of writing itself, with particular emphasis on hand-eye coordination, which is a critical factor for legible writing. Much like individuals experiencing motor dysgraphia, those with spatial dysgraphia demonstrate proficiency in oral spelling; however, they encounter challenges when attempting to replicate written text.

In contrast to motor dysgraphia, learners with spatial dysgraphia typically present significantly weakened drawing abilities (McBride, 2019, p. 119), with Deuel (1995) describing their drawings as “severely abnormal.” To support these learners, interactive games and activities that develop spatial awareness and visual clarity can be beneficial. Such activities include building puzzles, moving objects, solving visual riddles, or engaging in sounding-out games

that assist with grasping vowel letters and sounds (Yakovleva & Usenkova, 2021, p. 53; Yildirim & Surer, 2021, p. 15).

3.2.4.4 The executive subtype

The executive subtype of dysgraphia involves functional limitations with written language production (Feifer, 2022, p. 462). The key challenges faced by learners include difficulty planning and organising their thoughts and ideas, inability to apply grammatical rules and syntax, poor use of topic sentences and scattered details and little elaboration, inappropriate use of paragraph breaks and poor understanding of words and phrases and how they can be combined and used (Feifer, 2022, p. 462). At the forefront of this subtype, executive functioning is largely impacted. According to Mutlaq et al. (2024, p. 53), although the skills involved in executive functioning operate independently, they are interconnected; thus, limitations in any one of them can potentially adversely impact the functioning of other abilities. On the learning disability spectrum, many learners with ADHD commonly display difficulties with some aspects of executive functions (Feifer, 2022, p. 462). Therefore, to better support learners in this area, teachers should focus on activities that strengthen perceptual-motor skills and sensory learning that enable learners to perceive sensory information more cognitively and process it mentally, while also attending to the motor aspects (Mutlaq et al., 2024, p. 53)

3.3 THE IMPACTS OF WRITING DIFFICULTIES ON ADOLESCENTS

Writing difficulties affect adolescents across multiple developmental areas. Although manifestations differ between individuals, research consistently shows impacts across four interconnected areas: physical, academic functioning, social-emotional well-being, and behaviour (Hen-Herbst & Rosenblum, 2022, p. 1). These areas interact to influence learners' school experiences, impacting both their level of participation and their resilience.

3.3.1 Physical impact

Although individuals with writing difficulties are physically not any different to their peers, writing difficulties have been found to be more frequent in males than females (Dunn et al., 2021, p. 37; Georgitsi et al., 2021, p. 29). Physical symptoms can be subtle, as it mostly manifests as handwriting and motor coordination challenges. Common physical characteristics include poor posture, weak fine motor control, and reduced visual-spatial skills.

Fine motor difficulties, which are essential for writing, stem from challenges relating to small muscle movements (Hen-Herbst & Rosenblum, 2022, p. 2; Lopez & Vaivre-Douret, 2023, p. 2). Learners with writing difficulties may grip writing tools too tightly or too loosely and at an awkward angle, and then, as a result, often cause discomfort, fatigue, and reduced concentration (Gargot et al., 2021, p. 4; Gary, 2023, p. 17; Šafárová et al., 2021, p. 153).

Unusual posture is also often common due to difficulties crossing the midline of the body, resulting in learners curling the wrist, rotating the page, or leaning awkwardly while writing (Chung et al., 2020, p. 50; Stowell, 2023, p. 1). Although grasp and posture difficulties are typically identified in early childhood, adolescents still require professional assessment to ensure appropriate intervention (Asselborn et al., 2018, p. 2).

Additionally, handwriting, painting, typing, and daily activities like tying shoelaces or using utensils are hampered by poor muscle strength and limited dexterity (Hen-Herbst & Rosenblum, 2022, p. 2). This often affects school performance and social participation (Gargot et al., 2021, p. 4). Furthermore, visual and spatial weaknesses, such as reduced visual memory, poor spatial orientation, and difficulty perceiving letter shapes, also impair spelling, handwriting legibility, and writing fluency (Gary et al., 2023, p. 17; Hen-Herbst & Rosenblum, 2022, p. 2). Although these physical markers may appear insignificant, they can significantly undermine learners' confidence and concentration.

3.3.2 Academic impact

Writing difficulties can significantly affect academic functioning, often creating a gap between intellectual ability and written output (Chung et al., 2022, p. 238; Drotar & Dobes, 2020, p. 1). Adolescents with writing difficulties may have intact cognitive abilities but struggle to express ideas coherently due to working memory limitations that make it difficult to hold, organise, and manipulate information while they write (Hen-Herbst & Rosenblum, 2019, p. 11; Matre & Cameron, 2022, p. 2).

Furthermore, executive functioning difficulties, such as challenges in planning, organising and monitoring written work, can complicate tasks such as essay writing, time management, and self-regulation even more (Feifer, 2022, p. 457; Hopcan & Tokel, 2021, p. 2; Kalenjuk, 2022, p. 25; Mayes et al., 2019, p. 787). These challenges can affect other areas of learning, including mathematics, and lead to socioemotional concerns, such as frustration or low self-esteem (Devi & Kavya, 2023, p. 2; Lomurno et al., 2023, p. 2). Such challenges are particularly disabling in school environments that rely heavily on written tasks (Feifer, 2022, p. 457; Filipe, 2021, p. 168; Mutlaq et al., 2024, p. 53).

Writing difficulties can also affect reading comprehension (Aro et al., 2021, p. 3; Matre & Cameron, 2022, p. 12). Efficient reading and affected due to difficulties with decoding, phonological processing, letter reversals, and inconsistent application of phonics rules (Chung et al., 2020, p. 47; Gary et al., 2023, p. 18). Handwriting that is difficult to read, such as irregular lettering and poor spacing, further impairs written communication (Chung et al., 2020, p. 46; Hen-Herbst & Rosenblum, 2022, p. 2; Orim & Udie, 2023, p. 205). These difficulties often

extend to spelling, grammar, and syntax (Chung et al., 2020, p. 50; Döhla et al., 2018, p. 2; Feifer, 2022, p. 457; James, 2022, p. 142).

Additionally, organisational skills are also frequently affected (Tal-Saban & Weintraub, 2019, p. 7). Task management, time allocation, and material organisation are made more difficult by slow handwriting and difficulty taking notes or copying work (James, 2022, p. 142). However, despite these challenges, supportive school ecologies can strengthen learners' coping skills, self-efficacy, and academic engagement (Chung et al., 2020, p. 46; Hen-Herbst & Rosenblum, 2022, p. 2; Lomurno et al., 2023, p. 2).

3.3.3 Social-emotional impact

Socio-emotional difficulties may occur across both genders (Aro et al., 2021, p. 3; Polak & Grossman, 2024, p. 1056). Learners frequently experience heightened anxiety, attention difficulties, and emotional distress, especially when written performance is required (Hen-Herbst & Rosenblum, 2022, p. 2; Kalenjuk et al., 2022, p. 20). Research has found that anxiety among these learners is the most common emotional challenge (Gargot et al., 2020, p. 2; Lopez & Vaivre-Douret, 2023, p. 6; Nielsen et al., 2018, p. 652) and often manifest as worry, fatigue, irritability, or avoidance of writing tasks.

Furthermore, continuous academic pressure may also contribute to low self-esteem, helplessness, depressive symptoms (Gargot et al., 2020, p. 2; Kalenjuk et al., 2022, p. 20), peer misunderstanding, bullying, or isolation (Biotteau et al., 2019, p. 1875; Chung et al., 2022, p. 239).

3.3.4 Behavioural impact

Behavioural difficulties are often the result of emotional stress rather than deliberate wrongdoing. When learners with writing difficulties are given writing-intensive tasks, they may react by avoiding them, becoming disengaged, or acting disobediently (Lopez & Vaivre-Douret, 2023, p. 6).

Motivational challenges may also arise, especially when tasks feel irrelevant or when learners experience failure repeatedly (Biotteau et al., 2019, p. 1874). Furthermore, disengagement may be reinforced by limited peer support and negative academic experiences (Bonifacci et al., 2023, p. 2; Kalenjuk et al., 2022, p. 55). On the other hand, supportive classroom environments that emphasise encouragement and mastery-oriented feedback help restore motivation and regulate behaviour among these learners. Learners who struggle with both writing and reading may also display hyperactivity, inattention, and anxiety (Biotteau et al., 2019, p. 1875; Gargot et al., 2020, p. 2; Nielsen et al., 2018, p. 652), which further influences academic performance and peer relationships.

Importantly, adolescents with writing difficulties also demonstrate notable strengths, including creativity, strong verbal reasoning, empathy, and problem-solving (Matre & Cameron, 2022, p. 11; Reisman & Severino, 2020, p. 1). When schools intentionally build on these abilities, learners are better equipped to develop agency, perseverance, and resilience despite their challenges.

3.4 THEORETICAL FOUNDATIONS FOR SUPPORTING ADOLESCENTS WITH WRITING DIFFICULTIES

Learning theories provide a useful lens for understanding learner needs, guiding appropriate support, and shaping teaching, learning, and assessment practices to remain consistent with curricular goals (Bandono & Suharyo, 2021, p. 325). In this study, four theories are highlighted: behaviourist theory, cognitive process theory of writing (1981), constructivist theory (1980), and Vygotsky's sociocultural theory (1978). The section below provides a brief account of these learning theories, focusing on their key principles and application in practice.

3.4.1 Behaviourist theory and writing

Rooted in the works of scholars such as B.F. Skinner, John Watson, Thorndike and Ivan Pavlov, the behaviourist theory views learning as a stimulus-response process shaped by reinforcement. Desired behaviours are strengthened through rewards, whereas undesired behaviours decline in the absence of reinforcement (Burhanuddin et al., 2021, p. 88; Gandhi & Mukherji, 2023, p. 1). Writing is therefore viewed as a complex skill that can be broken down into smaller sub-skills, such as letter formation, spelling, and sentence construction. It is mastered through repetition, modelling, and immediate feedback (Bandono & Suharyo, 2021, p. 327; Daffern & Mackenzie, 2020, p. 15). Figure 3.2 below outlines some essential writing skills which can be taught through a behaviourist approach.

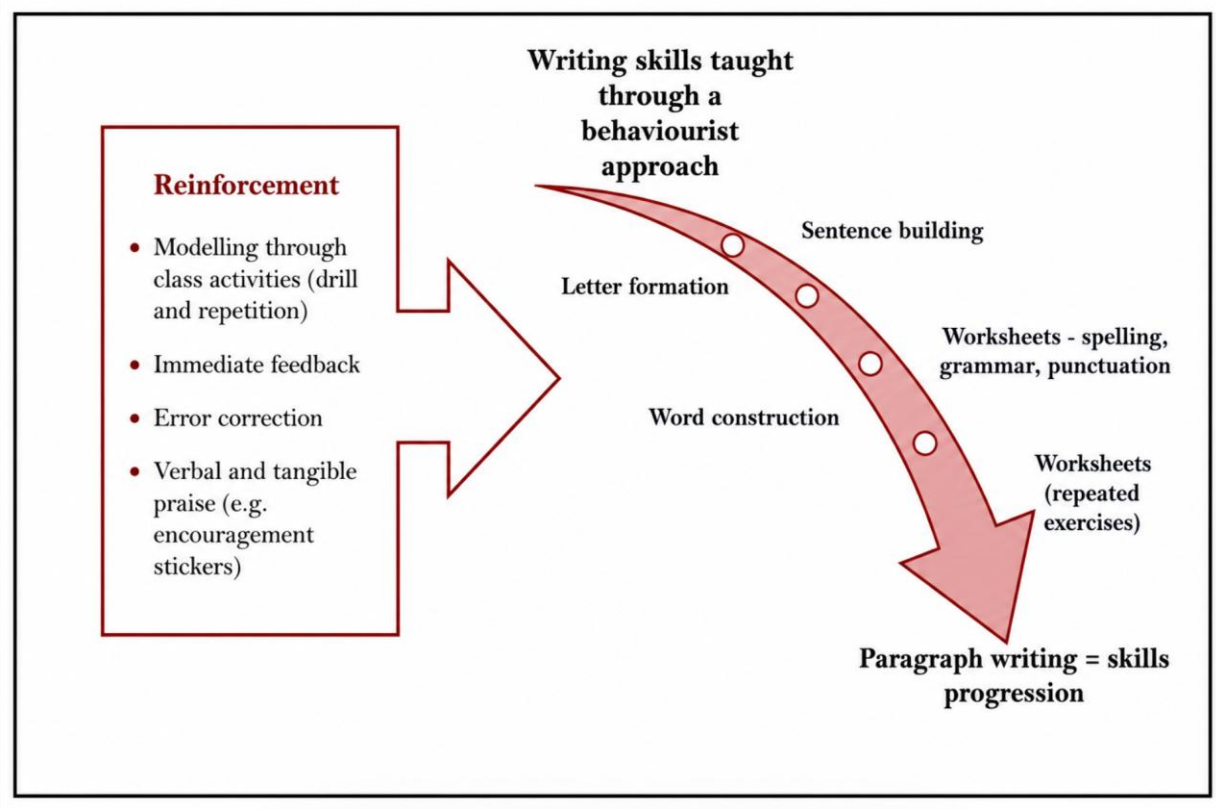


Figure 3.2: Essential writing skills taught through the behaviourist approach

Source: Adapted from Bandono & Suhary (2021, p. 327); Daffern & Mackenzie (2020, p. 15)

For adolescents with writing difficulties, behaviourist approaches are relevant because many still need explicit practice in foundational skills that are usually learned earlier in school. Activities such as tracing, copying, guided worksheets, and structured drills are examples of activities that can promote gradual improvement, while reinforcement (e.g., verbal praise or corrective feedback) helps maintain motivation and build confidence (Burhanuddin et al., 2021, p. 95; Tahan et al., 2022, p. 18). This theory, therefore, highlights writing as a behaviour that can be taught and observed through systematic training and instruction.

3.4.2 The cognitive process theory and writing

According to Flower and Hayes' (1981) cognitive process theory, writing is a recursive problem-solving activity that requires the coordination of multiple mental processes, such as memory, planning, language, and metacognition (Gandhi & Mukherji, 2023, p. 1). Writers move seamlessly between the stages of planning, drafting, revising, and editing, drawing on their knowledge, task goals, and strategies (Traga Philippakos & Davis, 2025, p. 145; Zhou, 2023, p. 408).

An individual's mind engages in complex psychological processes, including perception, imagination, visual thinking, analytical reasoning, abstract generalisation, and the transition

from internal to external speech. These aspects, apart from the motor elements of writing, are vital for efficient writers to complete tasks within and outside the classroom. Alongside the behaviourist theory, the cognitive process theory focuses on the mental processes involved in writing, such as brainstorming, planning, organising, drafting, revising, and editing. Daffern and Mackenzie (2020, p. 19) emphasise that learners may develop these writing skills through varied processes and stages. Figure 3.3 summarises the mental processes associated with the writing process.

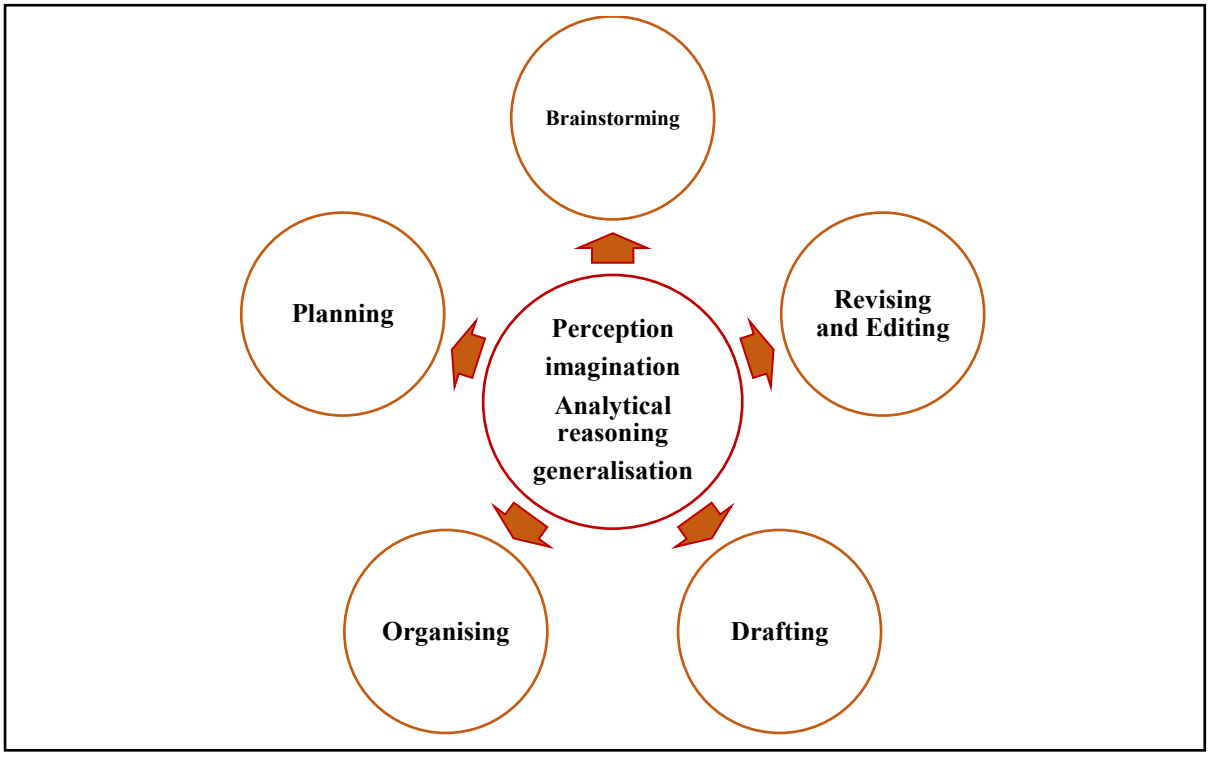


Figure 3.3: Summary of the cognitive processes involved in writing

Source: Adapted from Daffern & Mackenzie (2020, p. 19)

This theory is especially relevant for adolescents with writing difficulties, as many struggle with executive functions that support writing, such as organising ideas and evaluating written work. Pre-writing strategies, visual planners, and digital tools can help reduce the cognitive load and make the writing process easier to handle (Daffern & Mackenzie, 2020, p. 19). Teachers who embrace this perspective acknowledge that learners require differentiated cognitive support and scaffolded strategy instruction to improve both writing skills and broader learning dispositions (Zhou, 2023, p. 407).

3.4.3 Constructivist theory and writing

The constructivist theory of learning posits that learners actively construct knowledge and understanding through real-world experiences and interactions with their environment (Burhanuddin et al., 2021, p. 88; Efgivia et al., 2021, p. 210). Learning is viewed as a collaborative, exploratory process in which learners develop, test, and improve their ideas.

When teaching writing skills, this means moving away from traditional, teacher-led methods and instead designing learning opportunities that allow active engagement with content through hands-on activities and social interaction with teachers and peers (Selim et al, 2022, p. 16). Such an approach encourages critical thinking and active participation in the learning process (Sudarman et al., 2024, p. 177). Furthermore, every teacher is responsible for finding effective ways to accommodate their learners' needs while creating meaningful opportunities for active learning. Application of the constructivist theory can include incorporating hands-on activities, connecting handwriting practice and writing tasks to meaningful everyday contexts, and implementing collaborative activities. When carefully integrated into learning, the constructive approach enables learners to build on each other's ideas, reflect, express themselves, evaluate their learning process and progress, and identify areas for growth (Beiki, 2022, p. 29). Figure 3.4 summarises the key components of the constructivist learning theory.

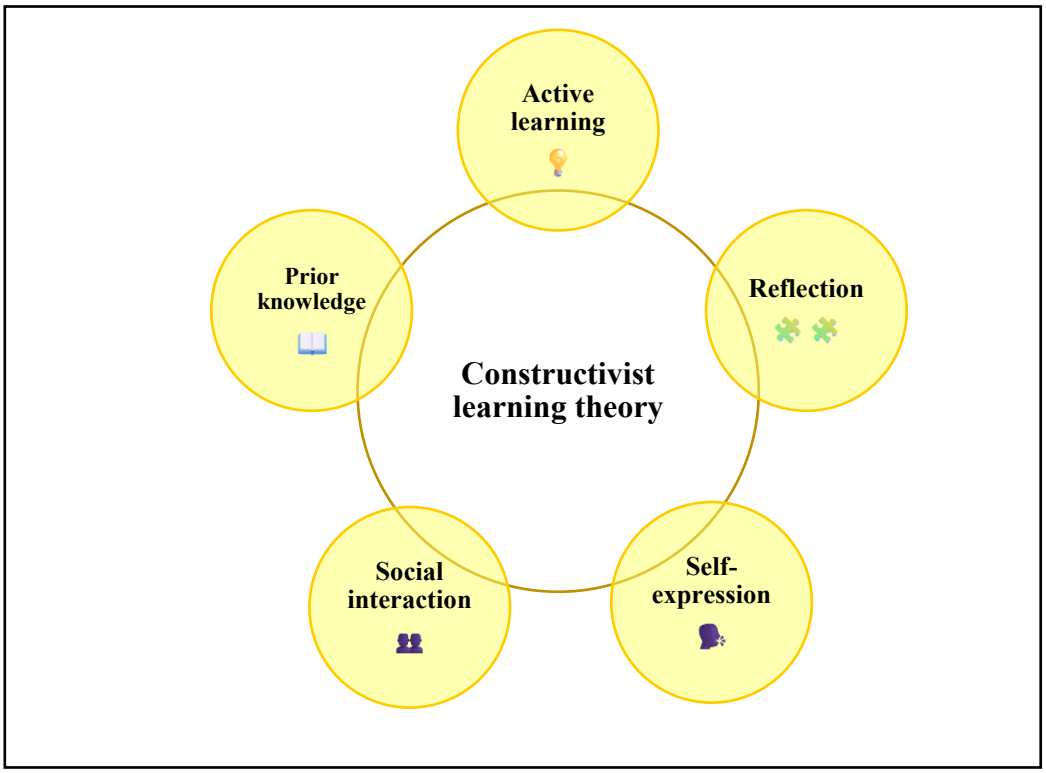


Figure 3.4: Summary of key components in constructivist learning theory

Source: Adapted from Beiki (2022, p. 29)

3.4.4 Vygotsky's sociocultural theory and writing

Vygotsky's sociocultural theory extends constructivist principles by emphasising the important role of social interaction, cultural resources, and mediated learning in cognitive development (Erbil, 2020, p. 4; Locklear, 2020, p. 3). Writing is viewed as a socially situated activity influenced by cultural norms and interpersonal relationships, rather than just being a mechanical or cognitive activity.

A key concept is the Zone of Proximal Development (ZPD), which refers to the space between what a learner can do independently and what they can achieve with guidance (Erbil, 2020, p. 4). Within an individual's ZPD, scaffolding is a key teaching strategy that helps the learner master a skill independently. Teachers and parents can provide temporary support that helps learners gradually move from poor writing skills to more adequate writing performance, enabling them to accomplish a task independently. Some of the more common techniques which can be used for this purpose include modelling, guided practice, peer tutoring, and small group work (Azi, 2020, p. 106; Spadafora & Downes, 2020, p. 3)

This view highlights that writing development is a shared task. When a more skilled adult or peer provides structured support and gradually withdraws assistance, the learner's proficiency increases. Understanding writing development through this lens positions the classroom and home environments as critical spaces where responsive interaction and guided participation can strengthen resilience and learning.

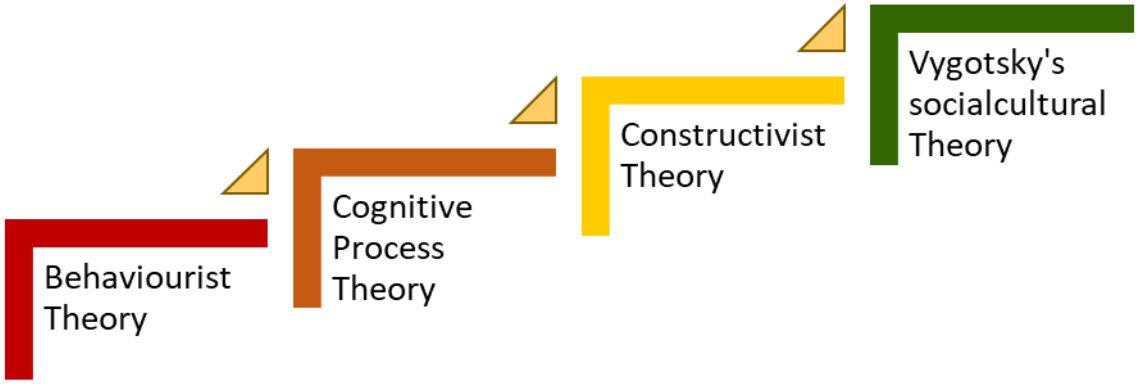


Figure 3.5: Summary of theoretical perspectives on writing

Source: Author (2025)

Figure 3.5 above illustrates the most relevant teaching and learning theories that are applicable in classroom settings. Together, these theories illustrate multiple pathways for supporting adolescents with writing difficulties. The behaviourist and cognitive approaches emphasise learning through explicit skills development and guided strategies. At the same time, the constructivist and sociocultural perspectives highlight collaboration, meaningful

engagement, and the importance of supportive learning environments. By drawing on all four theoretical foundations, schools can offer more holistic support by identifying exactly which skills learners need to develop greater proficiency in and attending to those needs accordingly, while also being cognisant of the social, cultural, and contextual factors that shape the individuals' writing success.

3.5 THEORETICAL FRAMEWORK: BRONFENBRENNER'S ECOLOGICAL SYSTEMS THEORY

This study is grounded in the social-ecological perspective on resilience, which views resilience as a dynamic process where individuals draw on both internal strengths and external supports to navigate adversity and achieve positive developmental outcomes (Rahman, 2025, p. 554; Ungar et al., 2019, p. 2). Bronfenbrenner's bioecological systems theory adds depth to this perspective by showing how resources are mobilised across interconnected systems. It frames adolescent development as a two-way process between the individual and their immediate environments, such as the home and school. Resilience is not a fixed trait; rather, it is continually reshaped by individuals' lived experiences of and by protective and risk factors present within their social contexts. For instance, in schools, writing difficulties as a risk factor can be especially evident when a learner displays heightened academic frustration and lowered self-esteem. However, protective factors such as supportive relationships and adaptive strategies within the school ecology help buffer these challenges and nurture resilience.

Bronfenbrenner's framework complements resilience theory by emphasising how interrelated systems influence development. At the microsystem level, everyday (direct) interactions with teachers, peers, and parents influence motivation and resilience. The mesosystem connects the home, school, and community, strengthening development and resilience. The exosystem, in turn, has an indirect influence on advancing development. At the same time, the macrosystem extends and shapes these inner systems (i.e., micro, meso, and exo) through broader structures such as social services, cultural norms, and societal values. The chronosystem at the outermost layer showcases an individual's development over time, past encounters, and life transitions (Bronfenbrenner, 1979; Tebele & Chaka, 2024, p. 19). Placing writing difficulties within this framework affirms that resilience is not simply an individual trait, but a socially embedded process shaped through reciprocal exchanges across ecological levels (Antony, 2022, p. 246).

Taken together, this perspective illustrates how adolescents with writing difficulties navigate adversity across systems and how resilience can be cultivated through supportive structures and culturally responsive practices. It also highlights the transformative role of schools as

ecological contexts that buffer risk and actively promote resilience. The SERT guiding this study is explored in Chapter 2, with further discussion of Bronfenbrenner's bioecological systems theory and its relevance to this research provided below.

3.5.1 Key concepts of the bioecological model (PPCT)

Bronfenbrenner's process-person-context-time (PPCT) model captures the essence of the bioecological systems theory of human development (Antony, 2022, p. 2246). The first element, known as proximal processes, refers to enduring interactions within an individual's immediate environment. These processes unfold within cultural and socioeconomic contexts, human relationships, and outcomes that grow more complex over time (Tong & An, 2022, p. 3). In resilience research, such processes are visible in the relationship adolescents form with parents, caregivers, teachers, peers, and community members.

The second element, referred to as person characteristics, evolves through dynamic exchanges within the environment and is distinguished by three categories: demand, resource, and force characteristics (Antony, 2022, p. 236; Sheng et al., 2024, p. 38).

- Demand characteristics such as age, gender, or physical appearance act as signals that invite or discourage responses from others. For example, when the handwriting of an adolescent learner with difficulties is shown to hinder their academic performance and provoke negative peer reactions, this points to the need for intervention (Tong & An, 2024, p. 4; El Zaatari & Maalouf, 2022, p. 4).
- Resource characteristics include abilities, knowledge, and emotional or material supports, which influence an individual's participation in proximal processes. Unlike demand characteristics, resource characteristics can either promote or disrupt optimal functioning within the environment. For example, if the learner has limited access to resources such as quality education, therapy, or stable housing, this can constrain their development. Whereas if the environment is resourceful, this encourages engagement with the environment and can produce positive development (El Zaatari & Maalouf, 2022, p. 4)
- Force characteristics, or dispositions, encompass temperament, persistence, and motivation. For example, learners with fragile temperaments or inconsistent motivation may struggle to sustain resilience, whereas with encouragement and strong dispositions, they can foster persistence and yield positive outcomes (Mawila, 2022, p. 2).

The third element, which is the context, lies at the heart of Bronfenbrenner's theory. Development occurs within nested systems: the microsystem, mesosystem, exosystem, macrosystem, and chronosystem, each exerting influence on the individual (Sheng et al., 2024, p. 39).

- Microsystem: This system involves the immediate settings such as the school classroom, family and extended families within the home, and peer groups in school or the neighbourhood that directly shape resilience. For learners with writing difficulties, teacher support and family responsiveness are critical in this system (Rahman, 2025, p. 553; Tong & An, 2024, p. 2).
- Mesosystem: This system involves connections between two or more microsystems, such as collaboration between parents and teachers or the teachers and school-based professionals, which strengthen consistent support and resilient outcomes (Rahman, 2025, p. 554; Tebele & Chaka, 2024, p. 19).
- Exosystem: This system involves indirect influences, such as school policies, teacher training and expertise, or parental work stress, which can affect the quality of support learners receive. Strong home–school linkages are imperative to support resilience (Rahman, 2025, p. 555; Tebele & Chaka, 2024, p. 19).
- Macrosystem: This system involves the broader cultural and societal beliefs about disability, literacy, and academic success that shape perceptions and practices. Notably, curriculum demands and teacher attitudes toward additional support further impact resilience (Rahman, 2025, p. 556; Tong & An, 2024, p. 6).
- Chronosystem: This system involves time and life transitions, such as the timing of diagnosis or intervention, and changes in microsystem structures which influence development. Within this system, protective factors across each system increase the likelihood of resilient outcomes (Elliott & Davis, 2020, p. 1129; Rahman, p. 557).

In summary, Bronfenbrenner's ecological systems theory provides a comprehensive lens for examining the school ecology as a resilience enabler for adolescents with writing difficulties. As the adolescent learner is situated within and at the centre of the interconnected systems of influence, the theory shows how resilience emerges through the reciprocal interactions between personal (demand) characteristics and environmental support (i.e., force characteristics). This study, therefore, positions the school ecology as central to resilience. It is within this ecology that proximal processes, contextual factors, and protective mechanisms converge to help learners thrive despite adversity.

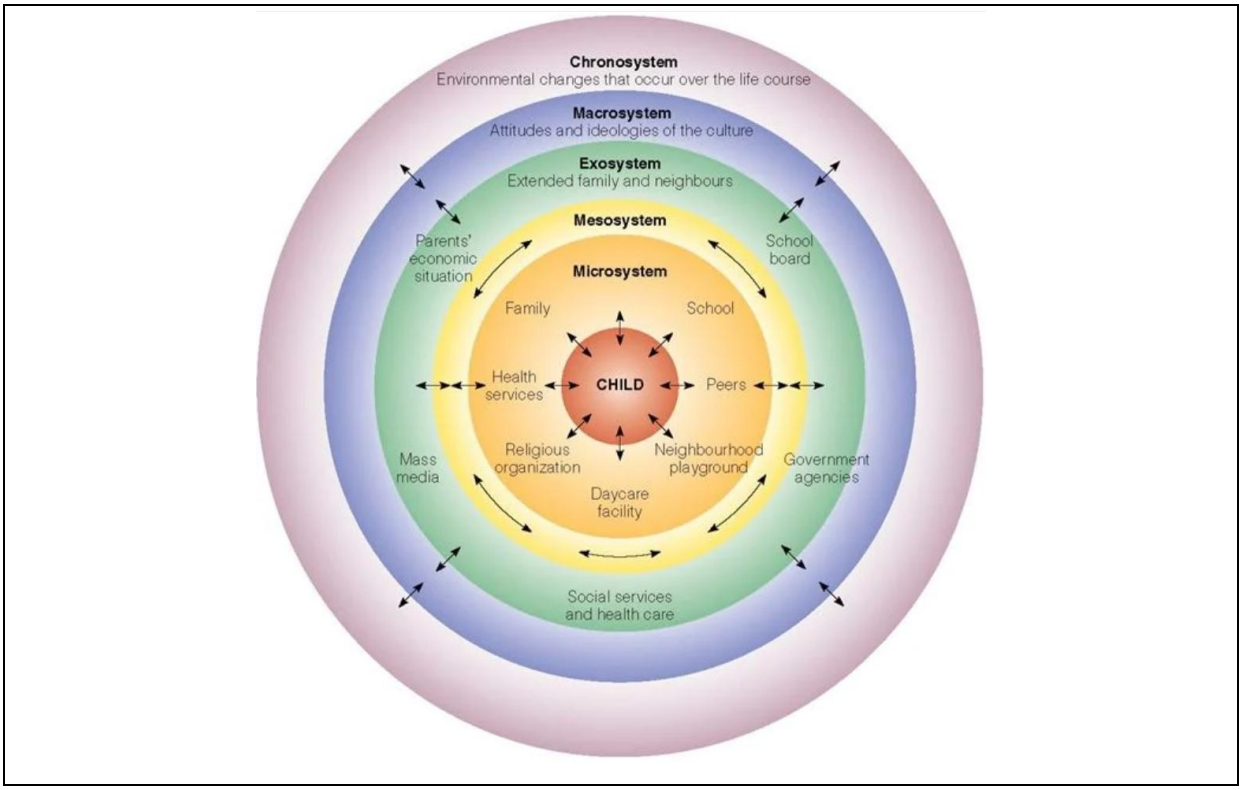


Figure 3.6: Bronfenbrenner's ecological systems theory

Source: Guy-Evans (2020)

3.6 SCHOOL ECOLOGY AND SUPPORT SYSTEMS FOR ADOLESCENTS WITH WRITING DIFFICULTIES

Drawing on the key concepts of the bioecological model introduced in Section 3.5.1, this section explores how Bronfenbrenner's (1979) ecological systems theory applies the microsystem, mesosystem, exosystem, and macrosystem to resilience in adolescents with writing difficulties. The focus is on the reciprocal influences between adolescents and their environments, showing how close relationships, wider support structures, and policy contexts all contribute to resilience. More specifically, the section forms a discussion around classroom strategies within the microsystem, namely the combined support of teachers, parents, and school-based professionals within the mesosystem, the role of SBSTs and DBSTs in the exosystem, and the influence of policies and guidelines within the macrosystem in promoting support and resilience for learners with writing difficulties.

The discussion that follows highlights how the school ecology, through its interconnected systems, can function as a resilience-enabling environment. By nurturing supportive relationships, aligning school-home structures of care, and embedding inclusive practices, schools can empower adolescents with writing difficulties to succeed academically and socially despite the challenges they face.

3.6.1 Classroom supports (microsystem)

To support learners with writing difficulties, effective classroom strategies that build essential learning skills, strengthen confidence, and promote resilience must be implemented through tailored approaches that respond to diverse needs. Since there is no single one-size-fits-all approach, teachers can combine broadly applicable strategies with more individualised methods to meet the unique needs of learners. As such, this section discusses key approaches, including differentiated instruction, scaffolded learning, assistive technologies, peer-mediated instruction, therapeutic support from school-based professionals, and faith-based learning. Each of these strategies is described as a way to enhance teaching and learning for adolescents through innovation, collaboration, and encouragement, collectively forming a comprehensive framework for addressing writing difficulties.

3.6.1.1 Differentiated scaffolding instruction

One way to support adolescent learners with writing difficulties is through differentiated scaffolding (Obatta et al., 2020, p. 260). Rooted in the works of Lev Vygotsky's ZPD and Ann Tomlinson's concept of differentiated instruction (see Chapter 5, Section 5.3.5.3), differentiated scaffolding can be understood as a relatively new strategy which combines two approaches to improve learner performance (Masinading & Gaylo, 2022, p. 132).

Differentiated scaffolding is a teaching approach where educators provide step-by-step support tailored to learners' individual abilities, gradually transferring responsibility from teacher to student while adjusting methods and levels of challenge so that all learners can progress toward independence (Fitriyana et al., 2024, p. 699; Ghaith & Awada, 2022, p. 3; Hayden et al., 2023, p. 311; Masinading & Gaylo, 2022, p. 132).

To support writing skills, differentiated scaffolding strategies can include guided writing tasks and modelling through think-aloud strategies. Breaking tasks into manageable step-by-step methods also stimulates cognitive processes in learning (see Chapter 5, Section 5.2.4.2) (Nardacchione & Peconio, 2021, p. 187). For example, in an essay writing task, when teachers begin by offering sentence starters, structured prompts and graphic organisers and move on to traceable notes, then structured templates, and later allow partially written/typed work, learners are able to transition towards independence and autonomy in completing the task. Teachers can utilise various differentiated scaffolding strategies to support learners' writing skills, in areas such as handwriting structures, writing conventions (e.g., spelling, punctuation, and grammar), and executive functions. These strategies, when applied correctly by teachers, can actively buffer against cognitive overload, repeated failure, frustration, and withdrawal.

As stated by Masinading and Gaylo (2022, p. 139), differentiated scaffolding not only improves learners' overall academic performance but also increases their confidence and emotional

state. Supporting this perspective, Newman and Latifi (2020, p. 12) further emphasise the emotional and social benefits of differentiated scaffolding, which they believe strengthen learners' self-regulation and self-efficacy, which are critical for resilience. However, for differentiated scaffolding to be effective, teachers require sound pedagogical expertise and the ability to assess and respond to individual learner profiles, along with sufficient availability of resources at school (Nardacchione & Peconio, 2021, 187; Obatta et al., 2020, p. 261).

3.6.1.2 Integrated assistive technologies

Assistive technologies (AT) include any tool, device, or software designed to assist individuals in managing academic tasks more effectively. The most frequently used tools for supporting writing include speech-to-text (STT), text-to-speech (TTS), word prediction software, and digital organisers. The use of these tools helps mitigate the mechanical and cognitive demands of writing, enabling learners to demonstrate knowledge without being constrained by their difficulties (Kambouri et al., 2023, p. 2; Moss et al., 2024, p. 18). For example, digital graphic organisers support idea generation and text organisation, while TTS applications assist learners by reading text aloud, facilitating self-editing and comprehension (Alkhawaldeh & Khasawneh, 2024, p. 55; Brady et al., 2021, p. 225). However, while Alkhawaldeh and Khasawneh (2024, p. 55), Bäck et al. (2024, p. 3110), and Kambouri et al. (2023, p. 7) highlight the effectiveness of assistive technologies in improving learner confidence and increasing participation in classroom activities, McNicholl et al. (2019, p. 9) assert that the intended use of AT software should be to maintain or enhance an individual's functional abilities and well-being, rather than serve as a permanent replacement.

To enhance its efficacy, assistive tools can be tailored to the individual learner's needs and made available at school and at home, often through collaboration between parents, teachers, and school-based professionals (Svensson et al., 2021, p. 205). While the academic benefits of using AT can be far-reaching, its use is also found to contribute to enhanced self-esteem and social interaction, empowering learners to communicate more freely and with ease (Bouck & Long, 2021, p. 255; Svensson, 2021, p. 197; Yenduri et al., 2023, p. 64909). Ultimately, AT fosters a more inclusive and supportive learning environment by reducing barriers to written expression and enabling full participation in the educational process.

3.6.1.3 Gamification

Gamification is another form of AT to support adolescent learners struggling with writing difficulties (Alkhawaldeh & Khasawneh, 2024, p. 59). Chan et al. (2022, p. 9036) describe gamification as a tool with game-like elements utilised in an educational environment for learning purposes. To better support learners with writing difficulties, gamification incorporates game-based elements into learning activities, thereby increasing learners' motivation and

engagement within the classroom. For learners with writing difficulties, gamified tools such as Quill and Classcraft can provide interactive and adaptive environments that make writing tasks less intimidating. In addition, Han and Wang (2025, p. 5) highlight the use of exergames (interactive games that combine physical activity with digital engagement). These games can be used to improve prewriting skills, particularly in spelling, grammar, sentence construction, brainstorming ideas, planning, and free writing.

The integration of gamification can be applied in classrooms and at home to improve writing. Within lessons, games can complement differentiated scaffolding by offering levels, rewards, challenges, and progress tracking that encourage persistence and achievement (Jayanti et al., 2024, p. 282). According to Chan et al. (2022, p. 9037), the implementation of gamification further supports visual attention, text comprehension, and memory. Jayanti et al. (2024, p. 279) add that it provokes heightened enthusiasm, a relaxed mood, enhanced visibility of learning progress, and an improved sense of ownership over the learning process.

While games may benefit learning and writing, they also have drawbacks, requiring careful implementation by teachers and staff. Teachers should be mindful of internal affective factors, such as the psychological effects learners may exhibit (e.g., frustration, game addiction, or overexcitement), as well as external considerations, including the practicality of a game within specific lessons and the ground rules around competition or cheating. Attending to these elements ensures that gamification remains a supportive and effective tool in supporting learner resilience (Shaban et al., 2021, p. 4).

3.6.1.4 C-Pens and ergonomic keyboards

Learners with writing difficulties can benefit from assistive tools such as C-Pen readers and ergonomic keyboards. The C-Pen is a portable pen-like scanning device which reads printed text aloud using TTS software, designed specifically to help learners with reading and language processing difficulties access content from textbooks or assignments more independently, both in class and at home (Alzubaidi et al., 2021, p. 2; Ramos et al., 2022, p. 2). However, the C-Pen has also proven to be particularly useful for learners with writing difficulties. While the C-Pen can improve a learner's reading fluency and comprehension, its use also indirectly supports writing by reducing the need to copy large amounts of text through traditional methods (Ramos et al., 2022, p. 4).

Similarly, the use of ergonomic keyboards, particularly those with split layouts, angled keys, or customisable settings, can help reduce hand strain and improve typing efficiency for learners with fine-motor challenges. Moreover, when combined with predictive text software, ergonomic keyboards can also improve typing speed and word accuracy. Together, they make

writing a less demanding and stressful task for learners with writing difficulties (Alnfiai & Kabir, 2024, p. 8).

As can be understood, assistive technology offers a range of tools that can empower adolescent learners with writing difficulties. These tools can foster independence and effectively support better academic achievement. However, for successful implementation, teachers need to be well-trained in using these technologies to provide personalised support that maximises their impact on learning outcomes, learner achievement, and resilience. Ongoing advancements, such as artificial intelligence (AI) software, may hold promise for further innovation in supporting learners with writing difficulties and additional support needs.

3.6.1.5 Peer-mediated support

Peer-mediated instruction, commonly referred to as peer support, has gained recognition as an effective pedagogical strategy for supporting adolescents with writing difficulties. This approach aligns with collaborative learning principles, in which teachers foster mutual assistance among learners by encouraging them to work in pairs or small groups to complete class work and assessments (Draper, 2023, p. 38; Hove & Phasha, 2024, p. 2; Shalaby & Agyapong, 2020, p. 3). The primary objective of peer support is twofold: social skill development and emotional well-being (Hove & Phasha, 2024, p. 6; Williams et al., 2024, p. 2). Through strategies such as reciprocal teaching (i.e., peers as teachers), peer editing, and collaborative writing, learners may develop and experience agency and shared responsibility. For instance, in a small group project, a learner with writing difficulties might contribute by taking part in articulating ideas in terms of content, while their peer(s) record the final written response, thus forming a cooperative process that fosters deeper cognitive and social involvement (Carvalho & Santos, 2022, p. 16; Okkinga et al., 2021, p. 347).

The integration of digital platforms such as Google Classroom, Edmodo or ClassDojo into peer-mediated instruction can further strengthen this protective function by enabling fair participation, reducing power imbalances, and providing real-time feedback (Oikarinen et al., 2022, p. 7541). When thoughtfully structured and implemented in the classroom, peer-mediated instruction actively mediates resilience through encouraging connectedness, belonging, and mutual support. In this way, opportunities are created for learners with writing difficulties to engage collaboratively rather than in isolation. Having peer support is also likely to reduce self-stigma, normalise help-seeking, and complement teacher-supported instruction (Sun et al., 2022, p. 9)

3.6.1.6 Therapeutic support

For many adolescents with writing difficulties, therapeutic intervention is an essential component of support (Shevchenko et al., 2024, p. 5). Therapeutic intervention may commonly

include sessions with an OT to improve fine motor skills for challenges with handwriting (Chung et al., 2020, p. 47), speech therapist to address language processing issues, and educational or school psychologists to assist in developing tailored learning strategies as well as provide support with emotional and cognitive challenges (Aremu & Adewunmi, 2023, p. 60; Baggett et al., 2024, p. 320). For example, an OT might use multisensory approaches, such as tracing letters or using a weighted pen, to help learners write better when their handwriting is not significantly weak and to strengthen hand-eye coordination (Han & Wang, 2025, p. 10). On the other hand, a speech therapist may focus on improving vocabulary and sentence structure to address difficulties with writing tasks in terms of comprehension and syntax (Shevchenko et al., 2024, p. 4).

Teachers and parents also need to work closely with the educational psychologist to ensure support is holistic and relevant to the learner's specific needs, as targeted strategies are most effective when applied across the school and home environment. Though schools may offer these intervention therapies onsite, parents play a crucial role in identifying and enabling access to these services.

In addition, according to Nabhan and Kamel (2021, p. 3) and Kalenjuk et al. (2024, p. 386), innovative approaches such as art therapy and technology-assisted interventions can further support emotional expression and self-regulation, providing learners with safe outlets for academic frustration and stress. These integrated interventions can strengthen resilience by developing coping strategies, emotional awareness, and self-understanding. Ultimately, therapeutic interventions provide adolescents with targeted support that enhances academic performance, protects their emotional well-being, and may strengthen vocational prospects later in life (Ayaz et al., 2025, p. 3).

3.6.1.7 Faith-based support

Faith-based support functions within the microsystem as a cultural protective factor, offering adolescents with writing difficulties a sense of belonging, purpose, and acceptance (Carter et al., 2023, p. 2; Mugeere et al., 2020, p. 13). According to Carter et al. (2023, p. 2), religious and spiritual beliefs often shape how learners interpret adversity. These beliefs can thus help them reframe their difficulties as challenges that can be overcome rather than as personal failures. Through this process of meaning-making, learners are able to strengthen their confidence, build emotional resilience, and develop a positive identity (Hardwick, 2021, p. 136; Naznin & Tabassum, 2021, p. 14).

Learners who attend schools with a religious ethos are more likely to benefit from faith-based support. For example, Islamic schools hold daily noon prayers in congregation for both girls and boys and incorporate Islamic subjects and Quran studies taught by spiritual members of

the community who form part of the school staff (Zulkifli et al., 2022, p. 2). Similarly, Christian schools may host morning prayers during assembly, facilitate participation in church services, or encourage involvement in the school choir. As Mugeere et al. (2020, p. 13) note, an individual's religious and spiritual beliefs can significantly influence their perceptions of themselves, others, and the world, making religious grounding a determining factor in resilience.

Therefore, schools, alongside the home, bear a great responsibility for supporting adolescents with disabilities and LD (Carter et al., 2023, p. 2). In South Africa, learners attending government public schools or private multi-faith schools receive less religious-based support, while strict faith-based schools, more commonly identified as independent private schools, provide the most. According to Hardwick (2021, p. 136), faith-based institutions can offer learners significant hope and encouragement to prosper through acceptance. In this way, learners develop an increased willingness to succeed and feel included and supported (Mugeere et al., 2020, p. 14). Carter (2020, p. 171) further highlights that faith-based support may be extended to help learners connect their writing difficulties to broader life lessons and help establish a community of belonging. This, in turn, promotes inclusion, reduces stigma, and provides emotional reinforcement that complements learning beyond the classroom.

3.6.2 School-home partnership (mesosystem)

Parents represent a critical extension of the school ecology, functioning as protective agents within the extended classroom microsystem (Guo & Keles, 2025, p. 2). Effective communication between school members and parents is crucial in establishing a cohesive support system and promoting resilience in adolescents with writing difficulties (García-Crespo et al., 2021, p. 2; Kwakkel et al., 2023, p. 1195; Twum-Antwi et al., 2020, p. 83). According to Myende and Nhlumayo (2022, p. 493), parental involvement can be a bidirectional transaction, such that parents can be involved in activities taking place within the school, as well as be involved in activities taking place at home, to make their child's educational goals achievable within the school and outside. The critical aspect here is parents' awareness of their child's specific writing challenges and unique needs so they can provide tailored material and emotional support (Aram & Yashar, 2022, p. 2; Bonifacci et al., 2023, p. 2). Myende and Nhlumayo (2022, p. 493) further outline that parental involvement involves shared connections among parents, teachers, school members, and the wider community, aimed at enhancing individuals' learning. In this regard, they summarise six types of parental involvement proposed by Epstein (2011), as seen in Table 3.1 below.

Table 3.1: Six types of parental involvement

Type of Involvement	Description
Parenting	Activities at home are designed to foster a supportive learning environment, ensuring learners are well-prepared for school.
Communicating	Communication between parents and teachers regarding homework policies, including monitoring and discussing the completion of schoolwork at home.
Volunteering	Parents participating in school activities such as assisting teachers, supervising learners, or supporting school maintenance.
Learning at home	Parents ensure learners practice what they learn in school through homework supervision and additional exercises and activities.
Decision making	Involvement in school governance, including participation in school boards, joining school committees, or advocating for disability groups.
Collaborating with the community	Families work with the community to obtain resources that support student learning and development.

Source: adapted from Epstein (2011)

Drawing on the above, Myende and Nhlumayo (2022, p. 514) define school-family partnership, including parent-teacher collaboration, as “a process whereby schools and families work together or collaboratively engage in activities that are aimed at enhancing children’s learning”. Berkowitz et al. (2021, p. 2) emphasise that parental engagement significantly influences children's social-emotional, developmental, and academic performance in school. Therefore, it is imperative that parents play an active role. Parental engagement also often includes parents volunteering for school events (e.g., sports day, school concert, hosting learning programmes), communicating with educators through regular parent evenings or scheduled meetings to discuss learner progress and learning needs, helping with homework and afterschool care, and joining parent-teacher associations (Çayak, 2021, p. 16; Paccaud et al., 2021, p. 2). These interactions ensure that all stakeholders work toward shared goals of supporting the learner’s resilience (Lehrl et al, 2020, p. 4). While active parent involvement has been associated with improved literacy outcomes (Aram & Yashar, 2022, p. 3), not all parents possess the educational skills necessary to assist effectively. Thus, the school needs to strive to ensure strong collaboration in order to equip families, where possible, with practical strategies to support learners’ writing development (Guo & Keles, 2025, p. 756).

Equally important as academic support is the emotional and social support that families provide. Since adolescents with writing difficulties may often experience frustration, lowered self-esteem, and social withdrawal, an emotionally secure and affirming home environment is essential in fostering resilience. In this regard, Hayden et al. (2023, p. 312) and Marquis et al. (2023, p. 5) point to the role of sibling relationships as crucial in this context. Siblings, like parents, often play a supportive caregiver role by providing academic and emotional support,

and assisting with social inclusion (Kadriu et al., 2025, p. 2). When close bonds are maintained, siblings can serve as confidants, advocates, and role models. Thus, siblings of learners with writing difficulties help shape their development and contribute to their sense of self-efficacy and resilience (Henry & Harrist, 2022, p. 73).

When family members adopt a growth-oriented approach, they help the adolescent learner with writing difficulties to frame their challenges as opportunities for learning. This perspective encourages them to keep moving forward and ensures that even little progress is celebrated. In turn, it boosts adolescent learners' motivation and strengthens perseverance. Henry and Harrist (2022, p. 74) note that a growth-oriented approach can also promote learner agency, support the development of active coping skills, and encourage hope, faith, and optimism, while also fostering meaning-making and positive self-perceptions.

Alongside family support, Twum-Antwi et al. (2020, p. 83) highlight the importance of a strong home-school partnership. Such collaboration ensures that learners receive consistent and holistic support in addressing their writing difficulties. This reinforces the central argument that the school ecology extends beyond the physical classroom to include home-school collaborations that shape adaptive outcomes.

3.6.3 SBST/DBST (exosystem)

In South African schools, SBSTs and DBSTs play a vital role in supporting learners who experience difficulties, particularly in reading and writing. SBSTs can comprise general educators, specialist educators, and members of the school management team (SMT). SBSTs are expected to assist both teachers and learners (DBE, 2014). For instance, teachers may receive guidance on strategies to support learners experiencing writing difficulties due to dysgraphia or dyslexia in the classroom (Garcia-Melgar et al., 2022, p. 2). SBSTs work directly with teachers to identify learners facing challenges and assist in developing support strategies that respond to individual needs. This support helps educators address the challenges they face when working with learners who face barriers to learning. In addition, SBSTs are tasked with identifying and referring learners who require further specialised support, such as therapeutic support, applications for accommodations, or placement in specialised schools, to the DBST (Moyo & Hove, 2025, p. 2). The objective is to ensure that learners with disabilities are given equitable opportunities to achieve positive outcomes within and beyond the school ecology.

The DBST at the broader district level ensures that inclusive education policies are effectively implemented. The DBST provides professional development for teachers, ensures the distribution of learning materials, and offers infrastructure support. These teams, composed of curriculum experts, therapists, and education support personnel, collaborate to equip

schools to meet the diverse needs of learners (DBE, 2014). Their role strengthens protective factors by ensuring consistency, resources, and expertise across schools. The combined efforts of SBSTs and DBSTs serve as protective factors that buffer learners against the risks associated with writing difficulties, allowing learners to achieve resilient outcomes.

3.6.3.1 Accommodations

South African educational institutions adopt a range of accommodations to support learners with disabilities, upholding the principle of equitable access to education (Langeveldt & Pietersen, 2024, p. 109). Accommodations include assistive devices, curriculum modifications, and technological tools that enable fair participation for learners with disabilities. These accommodations function as supportive resources to minimise the impact of learner difficulties while maintaining the integrity of the expected learning outcomes (Mavuso, 2022, p. 3). In line with this, Skae et al. (2020, p. 3) state that accommodations aligned with the South African Schools Act are designed to support and uphold learners' rights without imposing undue hardship. Having such measures promotes inclusion, thereby strengthening resilience within the school ecology.

As mentioned previously, referrals and approvals for accommodations must be secured from the district or, in some cases, the provincial support teams. Eligibility is contingent upon demonstrable need, substantiated by diagnostic documentation. Parents must initiate applications through the school SBST and DBST, supported by evaluations conducted by psychologists or counsellors (Ontong & Rossouw, 2024, p. 3). Applicable accommodations include extended time, readers or scribes, personal assistants, digital technologies, and alternative formats such as Braille or large print. Other supports include allowances for medication, rest breaks, handwriting and spelling exemptions, specialised equipment, separate venues, and sign language interpretation (DBE, 2016; Mavuso, 2022, p. 3; Skae et al., 2020, p. 4). In particular, learners with writing difficulties, scribes, readers, and additional time are most utilised in schools (Langeveldt & Pietersen, 2024, p. 109; Ontong & Rossouw, 2024, p. 3). Scribes remove barriers by recording dictated responses, enabling learners to demonstrate knowledge without being constrained by writing impairments. Extended time allocations, often 15 minutes per hour of examination, provide learners with the protective factor of reduced pressure, allowing them to engage meaningfully with tasks. These can be used in conjunction with other support interventions. In addition to accommodations, learners may be granted concessions, particularly for persistent handwriting and spelling difficulties. Such concessions may include exemptions from penalties for spelling errors or for handwriting legibility (Skae et al., 2020, p. 4). While accommodations and concessions are valuable strategies introduced by the Department of Basic Education (DBE) to support learners with learning barriers, they are not a universal remedy or long-term solution.

Learners with significant writing difficulties, especially those linked to comorbid learning disabilities, often require multifaceted approaches to achieve academic success. This recognition highlights the importance of embedding accommodations within the broader school ecology, where teachers employ a variety of inclusive teaching approaches, use supportive teaching and learning resources, and strengthen systemic collaboration between the home and school. By aligning school policies, practices, and support structures, schools can create conditions in which adolescent learners with writing difficulties thrive academically and socially despite adversity.

3.6.4 Policies (macrosystem)

Influenced by the Salamanca Statement (1994), the United Nations (UN) Convention on the Rights of Persons with Disabilities (2006), and the United Nations Educational, Scientific and Cultural Organisation (UNESCO) guidelines for inclusion (2009), international disability policies emphasise that learner support is a shared, systemic responsibility. This responsibility extends across government organisations, intergovernmental organisations (IGOs), non-governmental organisations (NGOs), and members of school ecologies. Guided by principles of early identification, flexible curricula based particularly on universal design for learning (UDL) and coordinated support within both mainstream and special needs education (Paju et al., 2022, p. 429), countries such as Finland, Canada, the United Kingdom, and Australia have developed structured systems. These systems focus more on tiered interventions, the use of individual education plans (IEPs), and collaboration between teachers, school-based professionals, and other stakeholders, which, together, establish effective support policies that meet international standards. Well-designed infrastructure and abundant resource provision enable positioning the school as a critical environment for supporting learning and promoting resilience among learners with SLDs and other disabilities in both mainstream and special education needs school settings (Ahtiainen et al., 2021, p. 8–9; Malet, 2023, p. 6; Mavropoulou et al., 2021, p. 4; Sider et al., 2021, p. 234; Sundqvist & Hannås, 2021, p. 690; Wolff et al., 2021, p. 7–15).

Similarly, in African contexts such as Ghana and Kenya, policies also show a commitment to inclusion and learner participation. In Ghana, however, support is based on a diagnostic and referral process. Learners with SLDs are more likely to receive support in mainstream schools, while only those learners with severe disabilities have access to LSEN schools. Inclusive and disability policies differ slightly in Kenya, where there is a continued reliance on special education needs settings (Nseibo et al., 2022, p. 5). Once learners receive a diagnosis, they are placed appropriately in the relevant school setting. While both contexts recognise the importance of belonging and participation, economic constraints and limited awareness remain a challenge. Thus, collaboration between relevant stakeholders within broader

communities may need to be expanded to strengthen systemic capacity and gain access to resources (Asamoah et al., 2022, p. 275).

Across international contexts, a universal strength is clear: learner support cannot rest solely on the individual. It requires collaboration between schools, families, school-based professionals, and communities. Appendix C provides a tabulated summary of the relevant policies in the countries mentioned above.

South African policies align with international principles, emphasising access, equity, and systemic support. Reflecting these efforts towards inclusion and support for persons with barriers to learning, key policy frameworks such as the South African Schools Act, Education White Paper 6 (2001), the Policy on Screening, Identification, Assessment and Support Strategy (2014), and the Guidelines for Inclusive Learning Programmes (2005) (see Appendix D) highlight the role of schools in coordinating support for learners with diverse learning needs through collaboration between SBSTs and DBSTs and relevant stakeholders who form part of the school ecology While these frameworks place the school ecology at the centre of support provision, they do not fully mirror international multi-tiered approaches. For example, within South Africa, tiered interventions and UDL principles are not fully implemented (McKenzie & Dalton, 2020, p. 6). A key challenge with South Africa, which prevents the full implementation of inclusive practices needed to meet or compete with international standards, is the gap between policy and practice. Unlike many high-income countries, particularly those in the global North whose schools are well-resourced, numerous South African schools, mainly in rural and township areas, are disadvantaged by poor infrastructure, limited resources, large class sizes, and uneven access to specialist education support (Mawila, 2022, p. 3). These variations and discrepancies in the education system between urban and rural or township schools (Muyambi & Ahiaku, 2025, p. 3) are what directly affect resilience, as learners' ability to adapt and cope depends not only on the presence of the policies but also on how they are enacted in everyday school life (Walton & Engelbrecht, 2022, p. 2149).

While this study does not exclusively focus on inclusion, these policy frameworks provide important context for understanding how school ecology functions and their relevance in enabling resilience by addressing learners' academic, social, emotional, and contextual needs.

The comparison between international and national policies highlights that resilience is strengthened when policies support collaboration, differentiation, and responsive support systems within schools. It also underlines the importance of all stakeholders being aware of these policies and understanding how they should be implemented in practice. In this way, South African policies are relevant to the study, as they provide a framework for schools to act

as protective and enabling environments for adolescents experiencing writing difficulties. Appendix D provides insight into some of the most pertinent policies relevant to supporting learners with diverse support needs.

3.6.5 **Development over time (Chronosystemic)**

The chronosystem, as conceptualised by Bronfenbrenner (1979), highlights the role of time and significant life events in shaping an adolescent's development. This system draws attention to both individual experiences and broader sociohistorical shifts that influence a young person's educational journey (Elliot & Davis, 2020, p. 1135). For adolescents with writing difficulties, the chronosystem includes factors such as changes in school policies, advancements in assistive technologies, evolving teaching and learning approaches, or major life transitions in living conditions, including relocation or coping with family disruptions (Tong & An, 2024, p. 4; Henry & Harrist, 2022, p. 74).

These changes, depending on their timing and nature, can either support or constrain the learner's development. Bronfenbrenner (1979) referred to these pivotal moments as ecological transitions, or periods when shifts in roles or environments require individuals to adapt to new circumstances (Tebele & Chaka, 2024, p. 19). For learners struggling with writing difficulties, these transitions are particularly critical, as the availability and timing of support may determine the extent to which they can benefit from educational interventions.

Hayes et al. (2022, p. 7) argue that development is shaped not only by personal circumstances but also by wider political, economic, and social developments that affect educational equity. For instance, the implementation of special education and inclusive education policies relays a systemic change that can initiate wider access for learners with diverse learning needs. However, as Tebele and Chaka (2024, p. 16) point out, these policies are only effective when they are carefully aligned with the specific needs of individual learners. Thus, policies will not be effective if implemented without a nuanced understanding of learners with learning disabilities and, more specifically, those who face writing challenges, as this may inadvertently deepen exclusion.

Therefore, the chronosystem prompts educators and policymakers to consider how the timing of support interventions, the pace of educational reform, and each learner's unique developmental path interact to influence academic outcomes (Hayes et al., 2022, p. 7). To foster meaningful inclusion, policies and guidelines, for instance, must be thoughtfully applied and continuously adjusted to ensure that learners with writing difficulties receive sustained, contextually relevant support throughout their educational journey. In this regard, Tebele and

Chaka (2024, p. 15) point to teachers as agents of change and emphasise the importance of teacher training.

3.7 CONCLUSION

This chapter explored the key concepts related to writing difficulties and the types of support that help build resilience in adolescent learners. It begins by defining SLDs, laying a foundation for understanding writing difficulties more specifically. The chapter then provides an overview of writing difficulties, focusing on the classification and categorisation of these challenges associated with dysgraphia, a more broadly defined specific learning disability, and describing the typical characteristics that often appear as symptoms in learners. Additionally, it examines learning theories as frameworks designed to support learners who experience barriers to learning, such as writing difficulties. Building on this understanding, the chapter discusses innovative support strategies that are considered best practice for adolescents with writing difficulties. These methods of support were considered through the perspective of Bronfenbrenner's ecological systems theory, which offers a comprehensive view of how resilience can be supported through the interconnected systems that influence a learner's development.

The next chapter outlines the research design and methodology employed in the study and provides a detailed account of the qualitative methods used to collect data.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

The content of Chapter 4, along with the relative positioning of its topics, is depicted graphically in Figure 4.1 below.

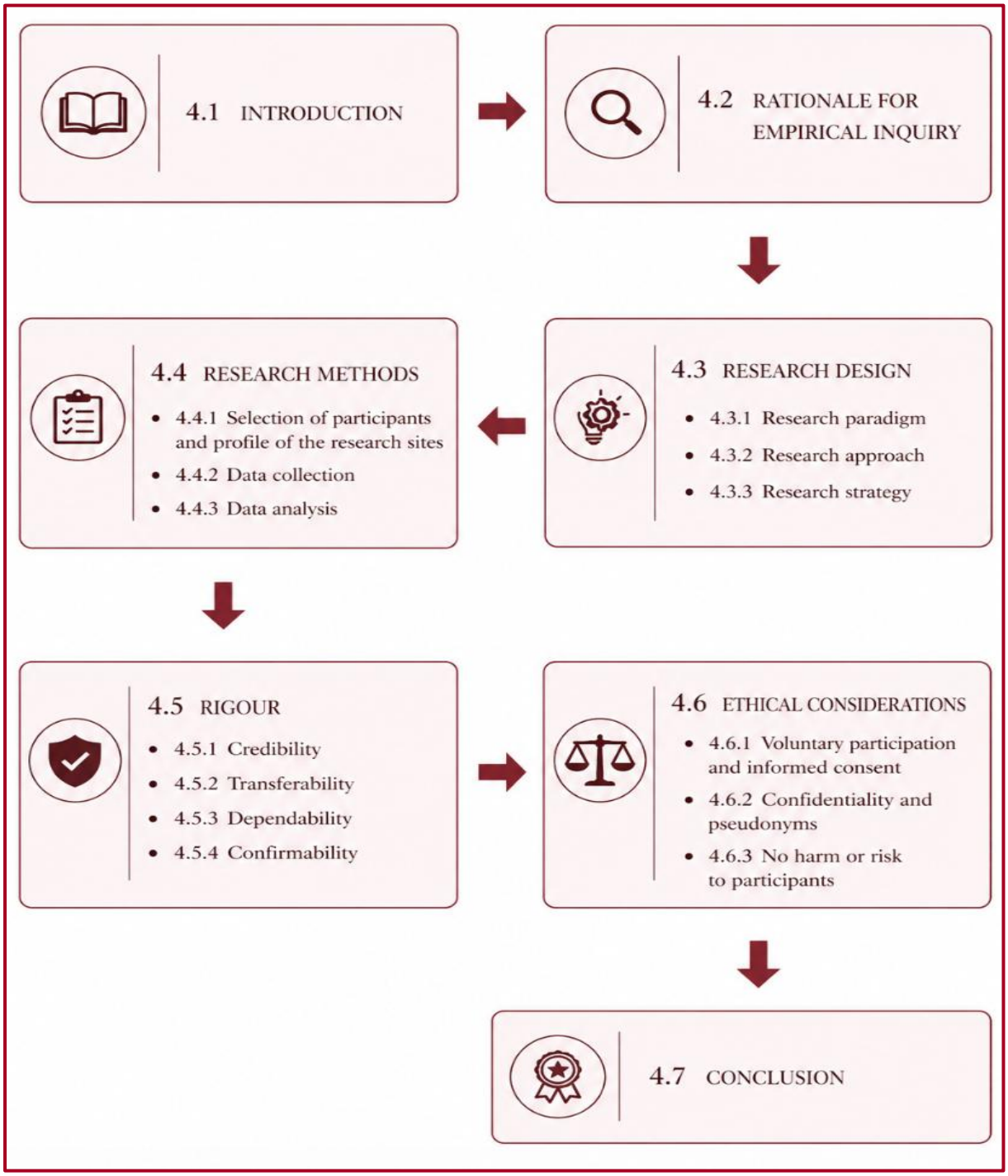


Figure 4.1: Overview of Chapter 4

4.1 INTRODUCTION

This chapter outlines the research design and methodology applied in the study. Table 4.1 provides an overview of the research methods and processes applied in the study. After presenting a brief overview of the research methodology, the chapter provides a comprehensive account of the research paradigm, research approach, and design deemed suitable for the study. The chapter further highlights the sampling technique used to gather data and the theoretical frameworks that guided interpretation of the data. Subsequently, the chapter provides a thorough explanation of the data analysis, concluding with a clarification of how issues of trustworthiness and ethical considerations are addressed in the study.

Table 4.1: Overview of the research methods and process

Methodological framework	Methodological justifications	Practical implications
Meta-theoretical paradigm	Theoretical framework	Integration of: • Resilience theory • Bronfenbrenner's bioecological systems theory
Research paradigm	Interpretivism/constructivism	• Ontological assumptions • Epistemological assumptions • Assumptions about human nature • Methodological preferences
Research approach	Qualitative	• Underlying principles
Research design	Multiple case study	• Closed system
Research strategies	Sample and research site	• Non-probability sampling • Specific schools that accommodate adolescent learners with writing difficulties
	Data-generating technique and documentation method	• Semi-structured interviews • High-quality photographs • Informal observation and field notes
	Role of the researcher	• Display honest and ethical behaviour • Safeguard participants and data • Access the thoughts and feelings of participants

Methodological framework	Methodological justifications	Practical implications
		• Convey knowledge to the body of scholarship
Data analysis strategy	Inductive method	• Reflexive thematic analysis
Quality assurance	Data verification method	• Credibility • Transferability • Dependability • Confirmability
Ethical considerations	Institutional	• Ethical clearance (College of Education, Unisa) • Permission from GDE • Informed consent

Source: Maree (2019)

4.2 RATIONALE FOR EMPIRICAL INQUIRY

From the researcher's point of view, my personal interest in the research topic, along with my prior academic studies and concerns about discrepancies in inclusive education for learners with SLDs and limited support at the policy level, motivated this study. Drawing on my Honours and Master's research, as well as my teaching experience as an intermediate/senior phase teacher, I observed that some learners in mainstream schools were performing below their expected age level, academically falling significantly behind their peers. The academic struggles were evident in learners' poor reading and writing abilities, often leading to feelings of incompetence and being looked down upon by both teachers and peers. Upon raising these concerns with other teachers, it was suggested that the learner might have a learning disability or some form of learning difficulty, which teachers frequently and somewhat broadly attributed to dyslexia.

Through my own engagement with learners, careful observation of their classroom behaviour, and review of their written work, I became particularly interested in learners who experienced difficulties with motor coordination and dysgraphia. This led me to understand more about dyspraxia, a specific learning disability associated with motor skill difficulties that significantly affect the mechanics of writing and are often linked to challenges in executive functioning. Over time, I refined my focus to writing difficulties, which involve not only the mechanics of writing but also comprehension aspects and executive functions.

Given these skills' profound impact on learners' academic performance and their tendency to extend beyond academics to affect learners' emotional, mental, and social well-being, my concern deepened as I recognised that, although a learner may be academically behind, this

should not place them in a position where success becomes unattainable. This realisation prompted an empirical investigation aimed at identifying and understanding how school ecologies influence the ways in which learners with SLDs, particularly those experiencing writing difficulties, receive support and develop resilience.

While existing literature presents multiple perspectives on resilience, a notable gap remains in understanding how resilience is fostered within South African school contexts for adolescents with writing difficulties. Much of the available research tends to generalise resilience processes, without sufficiently accounting for the nuanced interactions between school environments, teacher practices, and family involvement in supporting learners with SLDs. Furthermore, resilience research in South Africa has largely focused on broad categories of vulnerability, with limited attention given to the distinct experiences of adolescents facing writing-related learning challenges.

Given the limited knowledge base in this area, the research question is: *How do school ecologies facilitate resilience in adolescents with writing difficulties?* became the central focus of the study, necessitating a qualitative research approach. To guide the inquiry and provide a theoretical lens for understanding the phenomenon, the SERT and Bronfenbrenner's bioecological systems theory were adopted (see section 1.6.1 and 1.6.2). Together, these frameworks provide a robust, complementary perspective on how adolescents with writing difficulties navigate adversity within complex school environments.

The SERT model builds on Bronfenbrenner's ecological thinking and proposes a multidimensional understanding of resilience through four interacting layers: personal, relational, structural, and spiritual or cultural. The personal layer encompasses individual characteristics such as agency, self-esteem, and motivation that support adaptation in the face of adversity. The relational layer includes networks of support, such as peers, family members, teachers, and allied professionals, often conceptualised as "circles of care". The structural layer refers to non-relational elements within the social environment, including schools, community organisations, social services, and access to resources. The spiritual or cultural layer reflects the moral, ethical, and cultural values, beliefs, and worldviews that shape meaning-making and resilience.

Although these layers are described separately, they are deeply interconnected. Personal resilience is shaped through relationships, access to structural supports, and broader societal and cultural beliefs. Understanding the relational, structural, and spiritual or cultural dimensions of resilience is therefore essential for adopting a strengths-based approach to identifying protective factors and strengthening support mechanisms.

In addition, Bronfenbrenner's bioecological systems theory provides a holistic and contextual understanding of learner development by highlighting the dynamic interplay between internal and external influences within a learner's environment. This framework facilitates a deeper understanding of school ecologies and their impact on shaping both learner development and resilience.

While theoretical perspectives provide a conceptual foundation for understanding the phenomenon, fieldwork was necessary to identify the specific, contextually relevant factors that enable resilience and support resilient functioning in adolescents with writing difficulties. Through qualitative data analysis, new interpretations emerged that foreground the voices of teachers, parents, and school-based professionals (i.e., OTs and educational psychologists). By identifying protective factors and supportive practices within school contexts, the study makes a unique contribution to the knowledge base on writing difficulties. It informs the development of guidelines and recommendations aimed at strengthening resilience-supportive practices in South African schools.

4.3 RESEARCH DESIGN

Tenny et al. (2022, p. 1) define research design as the process researchers follow when conducting a study to determine who, when, and how data are obtained. This process explains the preparation and execution of a study (Huntington-Klein, 2021, p. 5; Maxwell, 2022, p. 10). By doing so, the research design outlines the steps and actions to achieve the study's overall objective and serves as a strategy that assists the researcher in determining how the research will be presented (Creswell & Creswell, 2023, p. 13). As a result, it is essential that clear guidelines are established prior to the commencement of the research to provide structure and direction, ensuring the study remains focused throughout. The research paradigm, research approach, and research strategy are discussed in Sections 4.3.1–4.3.3 below.

4.3.1 Research paradigm

Nieuwenhuis (2019, p. 66) describes a paradigm as "a set of assumptions or beliefs about fundamental aspects of reality which give rise to a particular worldview," while Ebohon et al. (2021, p. 64) similarly define it as a "worldview" informed by philosophical assumptions about social truth and reality. Nieuwenhuis (2019, p. 58) further posits that paradigms serve as a lens through which individuals construct their daily realities, comprising assumptions, beliefs, and inferences that shape an individual's worldview. A research paradigm reflects the researcher's opinions about the environment, shaping how they perceive, interpret, and operate within it (Kumatongo & Muzata, 2021, p. 20), and enables researchers to develop a specific understanding of the research situation (Nieuwenhuis, 2019, p. 142).

Research paradigms guide the methodological pathway of a study, determining the steps required to conduct and analyse data (Frost, 2021, p.5), and comprise principles and theories encompassing epistemologies, ontologies, and methodologies that demonstrate how meaning is created from a phenomenon (Yong et al., 2021, p. 5858). These aspects work together to provide a comprehensive framework for research (Saldaña & Omasta, 2022, p. 128), as represented in Table 4.2, following an interpretivist paradigm.

Table 4.2: Aspects of research paradigm followed an interpretivist approach

Ontology	**Epistemology**
• Ontology concerns what individuals consider to be real, including various truths, their nature, and essence. • It examines the existence, structure, components, and processes of reality, and how these elements interrelate. • Ontology questions whether reality is shaped by social context or personally created. • It explores whether reality is objective, subjective, or a lived experience, and whether it holds multiple truths. In this study, the ontological assumption is based on participants' (i.e., teachers, parents and school-based professionals) constructed realities of adolescent learners with writing difficulties.	• Epistemology explores how we understand a subject, including its truth and certainty. • It focuses on the foundation of knowledge and how insights are expanded and deepened. • Key questions in epistemology: How did knowledge come to be? What is the connection between the known and unknown? • Epistemology guides the researcher in systematically collecting data to develop new knowledge. In this study the epistemological view is that multiple, subjective realities exist based on how school ecologies facilitate resilience in adolescent learners experiencing writing difficulties.

Methodology	Axiology
• Methodology refers to the research design, procedures, and methods for discovering new data. • Includes aspects like data collection, participants, instruments, and analysis. • Methodology addresses the rationale for using specific systematic processes in research. • It enables knowledge sharing by detailing how the data was obtained. • Selecting relevant data collection methods is crucial for answering the research question and accessing the necessary knowledge.	• Axiology focuses on the significance and value of a study • The values underlying a study influence how it is conducted. • It clarifies the study's objectives and reasons for conducting research • Axiology provides insight into ethical conduct during research • Key questions include: What values guide the research? How will participants' rights be respected? What moral issues need consideration?
The study follows a qualitative research approach to gain an in-depth understanding of the role of the school ecology in facilitating resilience in adolescents with writing difficulties, utilising qualitative data collection techniques to generate the data.	The researcher is immersed in the research process, and thus ensures the research is 'value bound' though subjective. Adhering to ethical considerations retains value while upholding how participants experiences are interpreted, and how the role of the school ecology is evaluated in facilitating resilience.

Source: Flick (2023, p. 60); Moroi (2021, p. 129); Willig (2023, p. 5)

This study sought to understand real human activity within natural learning environments. The researcher conducted interviews with teachers, parents, and school-based professionals (i.e., OTs and educational psychologists) who support adolescent learners experiencing writing difficulties. The researcher also undertook observations of the school environment during visits to the schools and during informal follow-up interviews with teachers. From these observations, field notes were generated to document any unique insights teachers shared or observations made of the school environment that helped in understanding the phenomenon under study. These data were used to explore how participants drew on their knowledge and experiences to construct meanings of resilience and writing difficulties, and how they provided holistic support to learners. In light of this focus, the interpretivist paradigm was adopted as the guiding lens for interpreting the phenomena under study.

Interpretivism (also identified with constructivism), (see section 1.7.) is a qualitative research paradigm focused on exploring how meanings and understandings are created by examining human actions in terms of behaviour and culture, and their interactions within the social context (Nieuwenhuis, 2019, p. 66). Similar to the constructivist paradigm, the interpretivist approach aims to clarify the ideas and meanings people hold based on a particular phenomenon (Ali et al., 2021, p. 23). This paradigm is deemed suitable for this study as it

provides a foundation for understanding how individuals create subjective meanings and interpretations of their lived experiences within their natural environments. Additionally, interpretivism allows for exploring a complexity of views, acknowledging that multiple and varied social meanings exist (Pervin & Mokhtar, 2022, p. 423). Social meanings can be contextualised by incorporating various aspects of human participation while examining a particular phenomenon. This involves observing participants lived experiences and interactions in their natural settings, enabling the researcher to grasp the diverse meanings and interpretations they hold (Alharahsheh & Pius, 2020, p. 42). Creswell and Creswell (2023, p. 9) describe interpretivism as a research approach that focuses on real-life investigations, aiding in understanding participants' work environment and constructing personal interpretations of unique experiences. The following points summarise key aspects of interpretivism.

Interpretivist researchers must be mindful of how their own experiences can impact their interpretation of a situation, as knowledge is shaped by personal, cultural, and historical factors (Creswell & Creswell, 2023, p. 9). This is where the value of interpretivism lies: it encourages the researcher to appreciate others' perspectives by examining the participants' views and opinions on the circumstances in the research context (Creswell & Creswell, 2023, p. 9). This means that, within interpretivist, constructivist research, the researcher interprets what participants relate, while also recognising that what is conveyed reflects participants' own interpretations of reality.

Adopting an interpretivist paradigm, this study prioritises participants' subjective meanings of resilience in their school ecologies. This necessitated qualitative, interactive methods, including semi-structured interviews, observation field notes, and an inductive, reflexive thematic analysis. These methodological choices are described in Sections 4.3.2, 4.3.3, and 4.4.

4.3.2 Research approach

Creswell and Creswell (2023, p. 4) identify three main research approaches: qualitative, quantitative, and mixed methods. Among the three common research approaches, a qualitative approach is most appropriate for this study, as it seeks to understand how school ecologies facilitate resilience in adolescents with writing difficulties. Rather than testing hypotheses with numerical data, the study focuses on participants' lived experiences and meanings in natural school settings. (Aurini et al., 2022, p. 7; Creswell & Creswell, 2023, p. 5).

Given that this study aimed to explore how school ecologies facilitate resilience in adolescents with writing difficulties, a qualitative approach was followed. According to Creswell (2014, p.

4), qualitative research is defined as “an approach to inquiry that seeks to understand and interpret the meaning individuals or groups ascribe to a social or human problem”. As this study sought to explore the role of the school ecology in facilitating resilience in adolescence with writing difficulties, this approach enables the exploration of phenomena in their naturalistic environment, providing rich descriptions of the meaning that participants attach to these phenomena within their context (Lichtman, 2023, p. 39; Nassaji, 2020, p. 427).

Nieuwenhuis (2019, p. 142) posits that a characteristic of qualitative research is that the researcher becomes a research instrument, identifying themes and categories and describing the findings of analysed data. The rationale behind using a qualitative research approach was twofold. Firstly, it allowed the participants to be interviewed in their natural settings. Secondly, it enabled the researcher to immerse herself in the contexts and analyse the collected data effectively (Nieuwenhuis, 2019, p. 142). Table 4.3 below provides an outline of the nature of a qualitative study and its application to this study.

Table 4.3: Nature of a qualitative study

Qualitative study	**Inferences for the study**
This approach focuses on real-life situations as individuals in their natural environment experience them through interactions.	The researcher visited two schools in Gauteng to interview teachers, parents, and school-based professionals, and to generate observation field notes to understand participants’ roles within their natural environments.
Enables the collection of detailed first-hand information on the phenomenon being explored.	By interviewing and observing participants in their natural settings, the researcher gathered rich data, allowing for a better explanation of how the school ecology facilitates resilience in adolescents with writing difficulties.
Qualitative research helps researchers gather data and develop theories based on evidence collected during the investigation. This is known as a bottom-up approach.	Conducting interviews with teachers, parents and school-based professionals enabled the researcher to gather new knowledge on how school ecologies facilitate resilience through holistic support practices.
Uncovers participant views and opinions.	The researcher interviewed teachers, parents and school-based professionals as participants, allowing them to share what they thought constituted writing difficulties and resilience. This enabled the researcher to collect valuable insights into how the school ecology facilitates resilience in adolescents with writing difficulties.
The objective is to understand the subject through people's experiences, rather than predicting their actions.	The researcher visited the research sites to learn how teachers, parents, and school-based professionals facilitate resilience in adolescent learners, holistically through support systems within the school ecology. This enabled the researcher to further explore the various viewpoints within different settings.

Qualitative study	Inferences for the study
The qualitative design features detailed narrative accounts.	Thirteen participants from two schools were interviewed: **School A – Private mainstream school** Five teachers One educational psychologist Two parents **School B – Special needs education** Four teachers One occupational therapist During the interview, the researcher sought to identify methods and structures that enabled participants to facilitate resilience through support systems within the school ecology. In doing so, the researcher also made her own observations through these interactions and of the school environment to understand how the participants connect with the learners to promote resilience. This was achieved through various instruments such as interviews, observation field notes, and visual data (i.e., photographs)
Follows an inductive process data analysis process	The researcher gathered data primarily from interviews, observation field notes, and photographs, organising the information thematically following Braun and Clarke's (2022) guidelines

Source: Author (2026)

4.3.3 Research strategy

A research strategy is defined as the overarching plan that guides the design, conduct, and interpretation of a study to address the research questions (Creswell, 2014, p. 254). The research strategy provides the logical structure that links the research problem, theoretical framework, data generation methods, and analysis procedures. The type of research strategy implemented is informed by whether the study is exploratory, descriptive, and/or explanatory, as well as by its capacity to achieve the study's objectives and address the research questions central to the investigation (Mtisi, 2022, p. 1).

Since this study aimed to explore the role of school ecology in facilitating resilience among adolescent learners with writing difficulties, a case study design strategy was utilised. This strategy was considered appropriate because it aligns with the interpretivist research philosophy that underpins the study and is often employed as a research technique in qualitative studies (Creswell & Creswell, 2023, p. 15; Maxwell, 2022, p. 10). This is because

a case study allowed for the examination of specific details (what matters for the resilience of adolescents with writing difficulties) in depth within a particular setting (two schools) and provides an account of people's real-world beliefs and understandings (those of teachers, parents, and school-based professionals).

According to Tight (2022, p. 400), a case study can be defined as a comprehensive "analysis of persons, events, decisions, periods, projects, policies, institutions or other systems which are studied holistically", to understand the reasons and patterns of behaviour as they occur within its natural context (Tomaszewski et al., 2020, p. 3). Case study research is considered the most suitable approach for exploring unique or newly developed phenomena (Remenyi, 2022, p. 72). Although case studies allow researchers to collect extensive information, document details of unusual instances, and generate new ideas for future exploration, they have limitations. These include the inability to generalise findings or establish causal relationships between variables in a given problem (Hancock et al, 2021, p. 16). Table 4.4 outlines the types of case studies along with their definitions.

Table 4.4: Types of case studies

Type of case study	**Description**
Explanatory	Aimed at explaining how or why a phenomenon occurs, often through identifying causal relationships (Priya, 2021, p. 96; Sibbald et al., 2021, p. 292).
Intrinsic	Conducted because the case itself is of unique or special interest, not for generalisation or theory building (Coombs, 2022, p. 2; Sibbald et al., 2021, p. 293).
Descriptive	Provides a detailed, contextualised, and factual description of a phenomenon as it naturally occurs (Priya, 2021, p. 96; Sibbald et al., 2021, p. 292).
Instrumental	The case is used to provide insight into an issue, refine theory, or better understand a broader phenomenon (Sibbald et al., 2021, p. 293; Takahashi & Araujo, 2020, p. 106).
Exploratory	Undertaken to explore a phenomenon where little is known and to identify potential research questions or variables for future study (Priya, 2021, p. 96).
Multiple	Selecting more than one case to explore a single issue, to identify common patterns, relationships or similarities (Coombs, 2022, p. 3; Glette & Wiig, 2022, p. 1383).

Source: Coombs (2022), Glette & Wiig (2022), Priya (2021), Sibbald et al. (2021), Takahashi & Araujo (2020).

Among the six types of case studies, a multiple-case study design was used to develop an in-depth understanding of what contributes to resilience in adolescents with writing difficulties. This approach is well-suited for exploring topics across multiple cases, subjects, and

participants (Muzari et al., 2022, p. 14; Tight, 2022, p. 400). The two selected cases, an independent private mainstream school (School A) and a special needs education school (School B), were dynamic and unique, with individuals situated in different functioning environments, thereby allowing for a thorough examination of people, events, policies, challenges, and interactions (Halkias et al., 2023, p. 11).

Each case was analysed according to its specific issues and experiences, offering distinct narratives, yet a common theme emerged: the shared phenomenon of adolescent learners with writing difficulties (Takahashi & Araujo, 2020, p. 103). The distinctiveness of each case revealed different contextual realities: in the mainstream school, adolescent learners with writing difficulties were among fully abled peers, whereas in the special needs school, all learners presented unique challenges. Employing multiple cases enabled a systematic analysis of the various components of resilience within these contexts (Glette & Wiig, 2022, p. 1383). The aim was not only to understand this phenomenon but also to provide recommendations to parents, teachers, and school-based professionals to encourage resilient functioning among adolescents struggling with writing difficulties.

A limitation of utilising a multiple case study approach is that its findings cannot be generalised, as the unique experiences of individuals cannot be applied universally (Glette & Wiig, 2022, p. 1387). In this study, however, this approach was valuable because it enabled an in-depth examination of two distinct cases through interviews, observation field notes, and visual data (Sibbald et al., 2021, p. 292). These methods allowed participants to share their interpretations and meanings both verbally and visually, and enabled the researcher to engage directly with their accounts (Nieuwenhuis, 2019, p.89). This process enriched the study with thick description and nuanced detail, helping address gaps identified in the literature (Hancock et al., 2021, p. 84).

Although the same set of questions was posed to each participant group across the cases, the study focused on their commonalities, differences, and relationships to gain a deeper understanding of how these unique cases contribute to the overall subject: how the school ecology facilitates resilience in adolescent learners with writing difficulties.

4.4 RESEARCH METHODS

Research methodology, as defined by Hennink et al. (2020, p. 12), refers to the process by which knowledge is gathered about the world and the steps taken to generate research data. The methodology selected is grounded in the ontological and epistemological beliefs that guide the study. It involves discussing the research paradigm, research approach, and

research type (see Sections 4.3.1–4.3.3) to provide insight into the reasoning behind collecting specific data. Figure 4.2 below illustrates the typical path followed in research methodology.



Figure 4.2: The process of undertaking a research study

Source: Nieuwenhuis (2019, p. 58)

Methodological considerations encompass various processes, including selecting the research site and participants (Frechette et al., 2020, p. 4). Additionally, it outlines the techniques used to generate the datasets and the subsequent analysis thereof. These processes are discussed in Sections 4.41–4.4.3 below.

4.4.1 Selection of participants and profile of the research sites

Purposeful sampling was utilised to identify suitable participants for the study. Purposeful sampling is commonly used in qualitative research, where participants are selected based on their knowledge or possession of a specific trait (Meyer & Marhofer, 2022, p. 282). The sample is chosen for a particular reason, where the participants can provide valuable insights that help answer the research question. Therefore, the participants were selected based on their knowledge of learning disabilities and their experience working closely with learners requiring additional support to cope with their difficulties. However, it is important to note that purposeful sampling may not be representative of the larger population, as the responses obtained may be subjective and biased (Andrade, 2021, p. 86). The technique is used to reach well-informed individuals with comprehensive knowledge about certain issues due to their occupation, expertise, or experience.

Creswell (2014, p. 254) identifies four key areas to consider when identifying research participants and sites: 1) the location where the research will take place, in this study the research sites are the two schools namely a private mainstream and special needs education school; 2) the individuals who will be interviewed and observed (i.e., the teachers, parents and school-based professionals); 3) the specific events or actions that will be observed or asked; and 4) the methods used, such as interviews, observation field notes, and visual data (Tomaszewski et al., 2020, p. 6). Purposeful sampling was selected as a sampling technique since it aligns with the qualitative nature of the study and enables the selection of specific individuals to obtain the information needed.

Bakkalbasioglu (2020, p. 689) states that purposeful sampling is most effective when the researcher knows who can provide answers to the research questions. Two schools in the Gauteng region were selected, including a special needs education school that caters to learners with cerebral palsy, physical and learning disabilities, ranging from grades RRR–12 (School A) and a private mainstream independent school that accommodates all learners from grades RR–12 (School B). These schools were selected for their commitment to inclusive principles and emphasis on helping learners reach their full potential. The main aim was to explore how school ecology facilitates resilience in adolescents with writing difficulties in distinct educational settings.

This study provides valuable insights into the experiences of teachers and members of the school ecology. The participants in this study comprised nine senior/further education and training (FET) phase teachers, one OT, one educational psychologist, and two parents of adolescent learners experiencing writing difficulties in grades 7–12, aged 13–18. Research suggests that this age group is often overlooked and requires support to become productive members of society (Baird et al., 2021, p. 1147; Pincock & Jones, 2020, p. 1). Other factors considered in selecting the participants include the schools' use of English as a medium of instruction, the teachers' level of educational training, and the participants' willingness and ability to participate in the study. Finally, data were collected on schools' premises, as this allowed the researcher to observe the schools' resources and learning experiences. Table 4.5 below provides an overview of the participants who met the study's inclusion and exclusion criteria.

Table 4.5: Inclusion and exclusion criteria

Participants at the research site	**Inclusion criteria**	**Exclusion criteria**
Five teachers from a private mainstream school Four teachers from a special needs education school	Teachers teaching adolescent learners (ages 13–18) in grades 7–12 Qualified English, Afrikaans, Mathematics, Mathematics Literacy or Life Orientation teacher with a minimum of 4 years' experience Experience with teaching learners with learning disabilities	Teachers without a formal qualification Student teachers Teaching assistants
Educational psychologist at a private mainstream school Occupational therapist at a special needs education school	Qualified educational psychologist, school counsellor or occupational therapist with a minimum of 4 years' experience	Professional therapists other than educational psychologists, school counsellors, occupational therapists or speech therapists

Participants at the research site	Inclusion criteria	Exclusion criteria
Parents of adolescent learners with writing difficulties	English first language speakers or must be proficient in English as a First Additional Language	

Source: Author (2026)

4.4.1.1 Sampling of participants

An AP identified the participants in this study, and therefore purposeful sampling was utilised (Meyer & Mayrhofer, 2022, p. 282). According to Webber et al. (2024, p. 2), an advisory panel typically consists of individuals who represent the 'target' or stakeholder group in a research study. Such panels guide the researcher in engaging with participants based on their access to and knowledge of the participants, in this case, primary participants such as teachers, parents, and school-based professionals.

The AP for this study consisted of five individuals who were members of the school ecology (School A and School B) and therefore had direct access to and knowledge of participants supporting adolescent learners with writing difficulties. These members included the principal, a remedial staff member, and a teacher (a member of the SBST) at School A, and the deputy principal and a teacher (also a member of the SBST) at School B. The researcher met with the panel to discuss the research study and their understanding of participants who fit the criteria (see Table 4.5).

The AP then identified and contacted the participants who met the criteria. At School A, five teachers and one school-based professional (an OT) were identified, while at School B, four teachers and one school-based professional (an educational psychologist) were identified. Members of the panel initially contacted the teachers and school-based professionals to explain the study and request their consent by sharing the consent forms (see Appendices H–J). Once participants gave consent, the AP shared the email addresses and contact numbers of the teachers and school-based professionals with the researcher to schedule interviews. The teachers also assisted in gaining access to the parents of adolescent learners with writing difficulties. They explained the study to the parents and distributed consent forms. At School A, three parents initially consented, but one later withdrew due to unforeseen circumstances. At School B, one parent initially consented but later withdrew, and two others declined for personal reasons. In total, only two of six parents consented to participate. Considering that parent participation had thus been reduced, the study drew more on the accounts of teachers and school-based professionals who worked closely with the adolescent learners. While the smaller number of participating parents nevertheless meant that the parent perspective would be less extensive than the teacher and school-based professional perspectives, the

participation of two willing or motivated parents, to engage with the study, was viewed as resulting in a more positive representation of parental involvement as a resilience-enabling resource. This influence is considered further in Section 6.5.

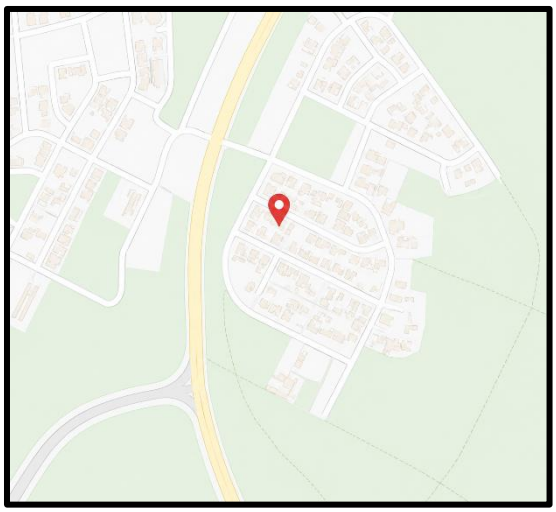
Once all the details were obtained, teachers, school-based professionals, and parents were contacted to set up interviews. Since open-ended semi-structured interviews were conducted, questions were not shared with participants in advance. During the interviews, many teachers and parents appeared anxious and reluctant to speak while being recorded. However, in follow-up discussions that were not recorded, they spoke more confidently and shared details that enabled deeper exploration of the phenomenon. Notably, however, before the interview recording, the researcher explained the purpose of the study to the participants, reassured participants about confidentiality, clarified that there were no right or wrong answers, and allowed time for informal conversation and questions (see section 4.5). The unrecorded follow-up discussions which followed were captured as field notes and coded alongside the other primary data to add depth to participants' perspectives and ensure credibility of the study.

This aspect of the data collection process was found to be unique and was highlighted for this purpose. Participants were confident in identifying resilient adolescent learners, who were well known to the teachers and formed part of their classrooms. The AP and participants also shared insights that contributed to the collection of visual data. Based on the two cases (School A and School B), the study included 13 participants in total.

4.4.1.2 Profile of the research sites

Two schools, one in the Southwest Tshwane district and the other in the East of Tshwane, in Gauteng, were sampled for this study. Figures 4.3 and 4.4 indicate how the two schools sampled are positioned within the respective districts..

School A



School B

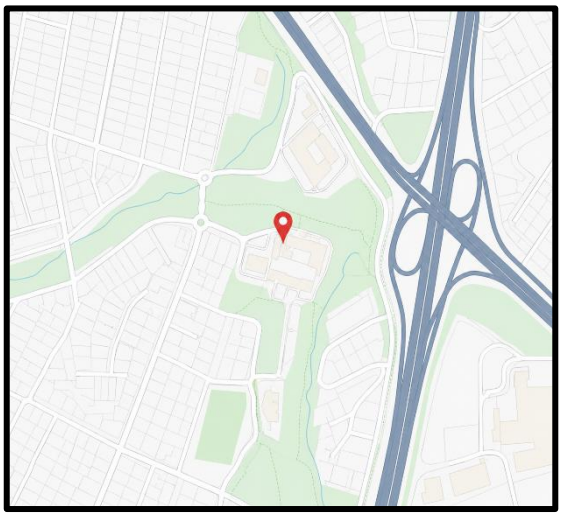


Figure 4.3: Showing the participating private mainstream school located in the Southwest of the Tshwane District

Source: GDE (2025)

Figure 4.4: Showing the participating special needs education school located in the East of the Tshwane District

Source: GDE (2025)

Below follows a brief background of the two identified schools.

SCHOOL A

School A is an independent private school situated in a suburb in the southwest of Pretoria, Gauteng Province. The school is categorised as an independent private institution. Independent private schools are those that do not receive substantial funding from the DBE (DoE, 2016), as they operate outside the public school system in South Africa and manage their own finances.

School A is a mainstream school located approximately 18.9 km from the Tswane North (TN) district. Its infrastructure includes wide-open spaces, spacious corridors, and 14 classrooms, mostly situated on the ground level. In addition, the school features a science laboratory, computer laboratory, Hifz Room (for religious studies), a multi-purpose hall, a Mosque (place of worship), a flood-lit astroturf sports pitch, an indoor soccer venue, a cricket pitch, padel courts, and a yoga room. There is also a detached administrative block with separate workstations and staff rooms for male and female teachers, in accordance with religious principles, as well as a kitchen nook in the staffroom.

The school caters for learners from Grade R to Grade 12. The language of learning and teaching (LoLT) is primarily English. At the time of the study, there was only one class per grade, with each grade assigned a dedicated class teacher. Learners remain stationed in their form classes for most of the day, with subject-specific teachers rotating to them. Exceptions include Physical Education, Arts, Physical Science, and Information Technology, for which learners move to designated venues.

The school also offers an Islamic Studies curriculum, compulsory for all learners from Grade R to Grade 11, in addition to the Curriculum and Assessment Policy Statement (CAPS) core curriculum subjects. Islamic Studies subjects include Islamic History, Islamic Jurisprudence, Arabic Language Studies, and Quran Reading.

Each classroom accommodates 28–31 learners, with a total school population of 29 teachers and fewer than 400 learners. The school employs a learning support staff member who serves as a remedial teacher and provides emotional support to learners experiencing learning barriers, including those with writing difficulties. Learners requiring support are accommodated

accordingly. Support is initiated either by parents submitting reports from educational psychologists or through identification and referral from teachers via the SBST. The learning support staff member provides assistance to learners who require remedial classes after school, manages disciplinary issues, and manages administrative affairs between parents, teachers, and learners.

SCHOOL B

School B is a public LSEN school, situated in the eastern part of Pretoria, Gauteng Province. Although the school is categorised as a public LSEN institution, placement is only possible through referrals from official district representatives of the Government Department of Education (GDE). The school is situated approximately 16.4 km from the TN District. It was originally a small hostel and has since been transformed into a fully functioning LSEN school. The school's infrastructure is designed as a wide, open space setup to accommodate learners with unique challenges such as cerebral palsy, physical disabilities, traumatic head injuries, and SLDs (including attention deficit disorder (ADD) and ADHD). The classrooms are on the ground level, with wide corridors that allow easy access for learners using wheelchairs or those requiring walking support. The school also features a computer laboratory, a multi-purpose hall, an arts room, and a sensory room, which is particularly designed for learners with autism who may require a quiet space for a timeout. A variety of sporting facilities are available, including rugby, soccer, netball, athletics, and cross-country, which form part of the league sports offered to learners. In addition, non-league sports such as table tennis, board games, chess, taekwondo, carpet bowls, small games, and robotics are available for learners aged 10–16 years. There is also an administrative block that includes offices, a staff room, and a staff kitchen.

At the time of the study, the school catered for learners from Grades RRR to 12. The Language of Learning and Teaching (LoLT) is offered in both English and Afrikaans, and learners may attend classes in their preferred language of instruction. Class sizes are small, with no more than 15 learners per class, and each class has a designated class teacher. The total learner population is fewer than 450.

The school offers three curricular streams to ensure that each learner has the opportunity to develop to their full potential. The academic mainstream curriculum, based on the CAPS framework, is suited to learners with mild to moderate difficulties. The vocational skills and life skills phases are better suited to learners with moderate to severe challenges. Learners in the senior phase (Grades 7–9) follow the core curriculum, which includes subjects such as Afrikaans Home Language and Afrikaans First Additional Language, English Home Language and English First Additional Language, Mathematics, Life Orientation, Social Sciences (History

and Geography), Natural Sciences, Technology, Creative Arts, and Economic and Management Sciences.

Learners in the FET phase (Grades 10–12) follow the core FET CAPS curriculum. Compulsory subjects include a home language (English or Afrikaans), a First Additional Language (English or Afrikaans), Mathematical Literacy, and Life Orientation, in accordance with government regulations. Learners may also choose from subjects such as Business Studies, Computer Applications Technology, Tourism, and Visual Arts.

The school provides a comprehensive range of auxiliary services, including educational psychologists, a physiotherapist, occupational and speech therapists, class facilitators, class assistants, and general assistants, all of whom form part of a multidisciplinary team supporting learners with specific challenges. The school also employs full-time nursing sisters, a social worker, and a counsellor. For learners who face travel constraints, a weekday hostel is available. Meals are served in a dedicated kitchen/diner, and transport facilities are provided for learners residing nearby. Aftercare services are available until 17:30 in the afternoons, where learners receive support with homework and studying. The school also offers a variety of cultural activities, including a rhythm group, singing group, dance, drama, art, Eisteddfod, dramatised poetry, and visual arts.

The school is committed to learners' holistic development, and all necessary resources and accommodations are organised to ensure that learners are supported as effectively as possible, enabling them to function optimally within the school system.

4.4.1.3 Teachers as participants

The teachers involved in the study were senior and FET phase teachers of adolescent learners experiencing writing difficulties. Five senior/FET phase teachers at School A and four senior phase teachers at School B agreed to partake in the study. In total, nine teachers participated in the study.

The teachers were sampled based on their accessibility in either special needs education or mainstream schools that support adolescent learners with learning disabilities. Since these teachers work directly with learners who have SLDs and demonstrate resilience despite their difficulties, it was anticipated that rich information would be obtained from the participants. To ensure anonymity and confidentiality, teachers were identified as A.1–A.5 and B.1–B.4. Data collected from questions 1–3 of the interviews (see Appendix A), along with information documented in field notes, were used to create participant profiles as demonstrated in Table 4.6 below.

Table 4.6: Profile of teachers (A.1–A.5 and B.1–B.4)

School	Code	Gender	Home language	Qualifications	Work profile
A	A.1	F	English	B.Ed (Senior and FET phase)	• Prior experience as a teaching assistant • Taught grades 10, 11 and 12 • Subjects: LO, business studies, accounting and geography
A	A.2	F	English	Senior Primary Teachers Diploma National Higher Diploma	• Over 20 years of experience • Taught grades 10,11 and 12 • Subject: Mathematical Literacy
A	A.3	F	English	B.Ed (Senior and FET phase) Specialisation: Management, Law and Policy	• 11 years of teaching experience • Taught grades 7–9 and 10–12 • Subject: English
A	A.4	F	English	B.Ed (Senior and FET phase)	• Over 5 years of teaching experience • Taught grades 7–9 and 10–12 • Subject: Physical Science and Mathematics
A	A.5	F	English	Senior primary Teachers Diploma National Higher Diploma	• 29 years of teaching experience • Taught grades 4–7, 7–9 and 10–12 • Subjects: English and Afrikaans
B	B.1	F	Afrikaans	B.Ed (Senior and FET phase)	• 20 years of teaching experience • Taught grades 8–10 at a mainstream school • Taught grades 6 and 7 in a special education needs school • Subject: English
B	B.2	F	Afrikaans	PGCE	• Prior experience as a tutor and facilitator at a special needs education school • 8 years of teaching experience • Taught grades 4–7 in a special education needs school • Subject: Life orientation

School	Code	Gender	Home language	Qualifications	Work profile
B	B.3	F	Afrikaans	B.Ed (Senior and FET phase)	• Prior experience as a facilitator and substitute teacher • Taught grades 4–7 • Over 5 years of experience • Subject: Mathematics
B	B.4	F	Afrikaans	B.Ed (Senior and FET phase)	• Prior experience as a teaching assistant • Over 5 years of teaching experience • Taught grades 4–7, 7–9, and 10–12 • Subject: English

Source: Author (2026)

4.4.1.4 Parents as participants

According to Kern (2022, p. 470) and Mpya and Sadiki (2023, p. 198), involving parents as stakeholders in education is critical for successful educational implementation, improving curriculum accessibility, and shaping learner behaviours and attitudes, all of which ultimately contribute to learner resilience. Based on this premise, a total of six parents from both schools were initially selected for participation in the study. As mentioned previously, at School A, three parents were invited to participate; however, one withdrew consent due to unforeseen circumstances. At School B, three parents were invited to participate; one consented but was unreachable, did not respond, and later withdrew. At the same time, two participants declined for personal reasons. Consequently, only two parents consented to participate in the study. Despite the limited number of parent participants, parents were intentionally retained in the study, as it was believed their perspectives offer valuable insights into meaningful learning opportunities and play a critical role in strengthening support structures and fostering resilience among learners. To ensure anonymity and confidentiality, parents were identified as Parent A.1 and Parent A.2.

4.4.1.5 School-based professionals as participants

Two school-based professionals participated in the study. At School A, the participant was an OT who worked on-site at the school once a week, on Mondays. At School B, the participant was an educational psychologist who was permanently based at the school. Both school-based professionals are directly involved in providing support to adolescent learners who experience difficulties with writing. Table 4.7 presents the participant profile of the school-based professionals. To ensure anonymity and confidentiality, school-based professionals were identified as 'Therapist A.1 and Psychologist B.2'.

Table 4.7: Profile of school-based professionals (Therapist A.1 and Psychologist B.2)

School	Code	Gender	Home language	Qualifications	Work profile
A	Therapist A.1	F	Afrikaans	BSc (OT)	• 30 years' experience • 20 years' experience specialising in learners with LD • School visits and private practice • Provided therapy to learners on Mondays at school

School	Code	Gender	Home language	Qualifications	Work profile
B	Psychologist B.2	F	Afrikaans	B.Ed Honours (Ed Psych) M.Ed (Ed Psych)	• Prior experience as a teacher • Over 10 years' experience • On-site at a special needs education school

Source: Author (2026)

4.4.1.6 Process of gaining access to the research sites and participants

UNISA mandates that researchers may not commence data collection until the university's Ethics Committee grants ethics clearance. Following approval of the research proposal, ethical clearance was obtained to conform to ethical guidelines. Once the ethical clearance certificate was obtained, the research process was initiated (see Appendix E). The steps taken to gain access to the research sites and participants are outlined in Sections 4.4.1.5.1—4.4.1.5.3 below.

4.4.1.6.1 Meeting with principals

According to Gřundělová et al. (2024, p. 2790), gatekeepers play a crucial role as mediators in gaining access to study settings and participants; establishing a good relationship with gatekeepers of institutions is crucial for successful data collection. This relationship not only guarantees easy access to the institutions but also ensures a high-quality participant pool for an in-depth inquiry into the phenomena under investigation. Considering this, appointments were secured with the principal of the mainstream private independent school and the deputy principal of the special needs education school. Through the permission letters approved by the Ethics Committee, the study's purpose was discussed, and the principals' permission was requested to conduct research at their schools. The principals granted permission for the study, signed the permission slips, and agreed to meet with the teachers to discuss the study and request their voluntary participation. The principals also informed the researcher of the consenting teachers and provided their details to arrange dates to meet as per the teachers' convenience.

4.4.1.6.2 Meeting with teachers

On the scheduled dates, meetings were conducted with teachers from the two respective schools. During these meetings, the purpose of the study was explained, and letters requesting their permission to participate were distributed. The teachers consented and subsequently signed the consent forms attached to the letters. The dates and duration of

the study were also discussed. Additionally, teachers were requested to assist in identifying the parents of the three adolescent learners with writing difficulties who would be willing to participate in the study. The teachers provided the researcher with the names and contact information of three parents.

4.4.1.6.3 Meeting with the parents of adolescent learners with writing difficulties

After making the necessary arrangements, meetings with the parents of the six learners with writing difficulties were conducted either virtually or on the school premises at a mutually agreed-upon time. During these meetings, the purpose of the study was explained before inviting them to participate by responding to the interview questions. The parents provided their consent to participate by signing the required documents, and a date was then scheduled.

4.4.2 Data collection

The second component of the methodological considerations pertains to the processes of data collection, analysis, and interpretation (Creswell, 2020, p. 204). Literature describes data collection as the process of producing empirical data for research purposes (Jack et al., 2023, p. 3). As mentioned previously, qualitative data collection methods were employed, including semi-structured interviews, and resources like workbooks, high-quality photographs, and unstructured field notes, to gain a deeper understanding of how high school teachers foster resilience through supportive learning opportunities (Creswell & Creswell, 2023, p. 200–201). Table 4.8 summarises the various techniques used in the study. Additionally, it is important to consider both the strengths and limitations of the data collection techniques. Table 4.9 outlines these strengths and limitations.

The data collection process began with a preliminary session where participants were provided with an overview of the concept of resilience. During this session, a poster was used to visually explain what resilience entails, and examples were provided to illustrate the concept. Following this, semi-structured interviews with open-ended questions were conducted to explore the participants' views on the topic. After the interviews, teachers and school-based professionals arranged days when it would be convenient for the researcher to observe the school environment and photograph the learning spaces and relevant resources. Finally, arrangements were made to conduct follow-up interviews with all participants to confirm responses from previous interviews and to add new insights or elaborate on how their support practices and activities foster resilience in adolescent learners with writing difficulties.

Table 4.8: Outline of research process and data-generating techniques at each site

Phase	Roles and responsibilities
1-hour Semi-structured interviews	**Researcher:** The study's purpose is introduced to participants, and rapport is built before conducting an open-ended interview in a secure setting. If responses were unclear, participants were prompted to elaborate or provide examples. **Teacher:** Participants had the chance to discuss and reflect on the questions and seek clarification where necessary.
2 hours field note observations and photographs	**Researcher:** Photographs of the school environment were captured, as were teaching and learning resources and documents that support resilience. Photographs of learners were provided by the school with the parents' and learners' consent, as these photographs are often used in the school newsletter, on the school website, and on the school's social media platforms. **Participants (teachers, parents, occupational therapists, and educational psychologists):** The participants had the opportunity to actively engage with the researcher and showcase their knowledge, skills, and perspectives on this topic as part of the school ecology.
1 hour Follow-up interviews	**Researcher:** Follow-up interviews were conducted to clarify responses, probe emerging themes, and verify interpretations derived from the initial data collection. **Participants:** Participants were given the opportunity to elaborate on their previous responses, confirm the accuracy of interpretations, and provide additional insights where necessary.

Source: Author (2026)Table 4.9: Strengths and limitations of data-generating techniques.

	Strengths	Limitations
Semi-structured interviews	The interviewer (i.e. researcher) can seek more detailed information on topics of interest by asking probing follow-up questions to gain a deeper understanding of specific issues.	Participants could offer responses they believe would satisfy the interviewer. Additionally, interviewees may give brief answers to speed up the interview process. Participant responses may be influenced based on familiarity with the interviewer relating to culture, religion, gender or other social realities.
Photographs	Photographs supplement other data collection techniques, such as interviews, and enable	Photographs provide only a limited perspective, focusing on a single facet of an object/thing/person.

	Strengths	Limitations
	a more in-depth understanding of a study. Photographs also provide a clearer visual account of the techniques and resources used. Thus, it also displays a better understanding of the challenges and resources explored in the study.	Photographs may be interpreted differently by different people, requiring additional elaboration.
Observation field notes	Field notes offer added details that might have been overlooked during interviews. Allows the researcher to capture important details within the natural setting, which provides depth to the study. Observations may enable the researcher to capture details that could not otherwise be obtained through interviews, or when participants are unresponsive or uncomfortable answering specific questions during interviews. Is a flexible technique which adapts to the environment and does not require the active participation of the subjects being studied. This data-generating technique also enables the researcher as an observer to revisit and reflect on the events that transpired, helping them distinguish what was valuable in the field from what was not.	The researcher, as an observer, might overlook important details while recording the event. This can make it challenging to achieve data saturation, as the information gathered is never sufficient. May require prolonged engagement in the field or research setting. Researcher bias may influence the reliability and validity of the data. Participants may shy away from portraying reality if they are aware that observation notes are being documented, and this may not reflect a true account of the natural setting. Can be time-consuming and requires well-rounded analysis skills.

Source: Karatsareas (2020, p. 102); Milasan (2024, p. 3); Morgan (2022, p. 66); Smriti (2019, pp. 159–162).

Noting the limitations of each data-generating technique, strategies were applied to reduce these challenges and enhance the trustworthiness of the results. Throughout the study, the researcher engaged in self-reflection to ensure that her own subjectivity did not influence the findings. To minimise bias in the interviews, participants were constantly reassured that there were no ‘right’ answers and that confidentiality was emphasised. Furthermore, probing questions were used and informal follow-up interviews conducted, while employing peer debriefing, member checks, and triangulation (see Section 4.5.1) to strengthen the credibility of the data.

4.4.2.1 Semi-structured interviews

Semi-structured interviews are characterised by probing questions, with topics and actions prepared as a guide prior to the interview (Naz et al., 2022, p. 45). According to Knott et al. (2022, p. 1), interviews enable participants to discuss their interpretations and understandings of specific phenomena, providing a platform to express their insights in their own words. This format enables researchers to capture detailed information during interviews, which then facilitates the emergence of meanings and interpretations (Karatsareas, 2020, p. 100; Ruslin et al, 2022, p. 24). Semi-structured interviews are particularly suited to contexts where a structured approach is necessary, allowing probing questions to guide the discussion (Roulston & Halpin, 2022, p. 680).

In this study, the interview questions were open-ended, allowing participants to share their thoughts and perspectives on how they promote resilience in adolescent learners through support and meaningful learning opportunities. Semi-structured interviews were specifically used to probe participants' understanding of resilience and their role in supporting learners to facilitate it. This method also sought to identify the challenges and benefits the participants experience in this context. Each participant was interviewed face-to-face, individually, with the sessions recorded using a voice recorder. Prior to each interview, permission was obtained (see Appendixes G–J).

The recorded interviews, which lasted between 45 minutes and an hour each, were conducted once with each participant at a convenient time, such as during free period(s) or after school on the school premises. The interview data were subsequently transcribed and analysed.

4.4.2.2 Photographs of resources and learning environment

Photo-centred research, also referred to as the 'silent voice', is a method that allows for the exploration of the complexities of a phenomenon that would not otherwise be captured through text or oral language, and is the third method employed in this study (Cleland & MacLeod, 2021, p. 231). This approach involved capturing photographs of the learning environment (e.g., classroom settings and facilities) and resources (e.g., lesson plans and workbooks) to demonstrate how the school ecology facilitates resilience in adolescent learners experiencing writing difficulties. As a supplementary data collection method, photographs offer multiple ways of knowing—through perception, symbols, and signs (Cleland & MacLeod, 2021, p. 231). The use of photographs enabled access to diverse perspectives and interpretations of participants' lived experiences and the "power-imbued contexts" they navigate (Milasan, 2024, p. 2). Analysing these photographs enabled deep reflection on participants' responses concerning the facilitation of resilience in adolescents with writing difficulties (Zhang & Hennebry-Yeung, 2023, p. 1).

Aligning with the research objectives, photographs serve as a tool to facilitate dialogue among participants and policymakers, potentially leading to social change (Shaw, 2021, p. 346; Spiegel, 2020, p. 123). As such, the purpose is to provide readers, educators, parents, and other members of the school ecology with valuable insights into fostering resilience in adolescents struggling with writing due to learning disabilities. To maintain confidentiality, the risk of exposure is mitigated by using face blurring, i.e., omitting participants' faces from photographs and ensuring that they are not used without the participants' consent (Zhang & Hennebry-Yeung, 2023, p. 8). The researcher captured photographs of the learning environment, including resources, facilities, and documents, during school visits as part of observations. However, photographs featuring the adolescent learners with writing difficulties (non-participants) were shared with me by the school. Since the shared photographs are often featured in the school's newsletter, on the school website, and on the school's social media platforms, the school had already obtained consent from both parents and the adolescent learners themselves.

4.4.2.3 Observation field notes

Field notes are a qualitative data collection method that enables researchers to document the events and experiences of the individuals under study. These notes are produced incrementally by reflecting on personal observations and reactions, often guided by specific questions that help identify possible actions and underlying reasons for responses (Burkholder & Thompson, 2020, p. 3; Hennink et al., 2020, p. 197). In this study, a set of guiding questions was developed (see Appendix K) based on the semi-structured interviews to help identify actions and events that contribute to resilience in adolescent learners with writing difficulties. Additionally, to enrich the detail and depth of the field notes, informal follow-up interviews were conducted with all participants. During the initial interviews, participants appeared anxious and were not fully comfortable being recorded. However, once the recorded interview ended, they became more relaxed and willing to share their thoughts. The researcher realised that the information they provided in these moments was important, so informal follow-up interviews were scheduled and conducted. These were then captured in observation field notes, with the researcher's reflections documented alongside the observed events (Hennink et al., 2020, p. 196).

For the purposes of this study and to generate observation field notes, an unstructured, uncontrolled observational approach was employed. Observations focused on the school environment, including infrastructure, facilities, available resources, and interactions among individuals within and around the school. These observations were conducted during visits to the schools to explore how protective resources and meaningful learning opportunities may support the resilience of adolescents with writing difficulties. Field notes were thus generated

to document observations in detail, with particular emphasis placed on maintaining neutrality throughout the observation process to minimise bias (Smriti, 2019, p. 157).

4.4.3 Data analysis

Once sufficient data has been collected to answer the research question, literature emphasises the importance of analysing the acquired information (Saldaña & Omastan, 2022, p. 162). Thus, data analysis involves the process by which researchers interpret both textual and visual data to “infer statements about the implicit and explicit dimensions and structures of meaning-making in the data and to establish what is represented in it” (Flick, 2023, p. 386). Saldañha (2020, p. 882) explains that much of the analysis process focuses on providing clear insights from our observations and discoveries about the phenomenon under study.

According to Lester et al. (2020, p. 95), qualitative data analysis requires preparing the data for analysis, conducting various analyses, and gaining a deep understanding of the data to represent and interpret its larger meaning. During analysis, researchers form patterns, clusters, and themes using a bottom-up approach to organise the data into a coherent whole (De Casterlé et al., 2020, p. 1; Humble & Mozelius, 2022, p. 77; Lyons & Coyle, 2021, p. 5). By organising and classifying the data into meaningful codes, the researcher can make interpretations that align with the literature and theoretical framework (Flick, 2023, p. 288). Following through, in this research study, the aim of qualitative data analysis was to draw on the data collected in terms of words, phrases, themes, and patterns (Naeem et al., 2023, p. 2).

The data analysis method utilised in this study involved inductive analysis. This is because inductive analysis facilitates the comprehension and elucidation of a phenomenon, specifically the role of school ecology in facilitating resilience, as noted by Humble and Mozelius (2022, p. 77). Inductive analysis entails categorising themes, which often leads to its association with thematic analysis. This is due to its ability to connect different knowledge or thoughts, contrast, and correlate various aspects of information, as noted by Naeem et al. (2023, p. 7). To analyse data from multiple sources, including semi-structured interviews, observation field notes, and photographs, a reflexive thematic analysis was used to manually arrange, group, and categorise emergent themes from the voice recordings and field notes (Lester et al., 2020, p. 96). The themes elucidate the participants' responses and their interrelationships, which play a crucial role in constructing new knowledge and translating the data (Lyons & Coyle, 2021, p. 5).

Braun and Clarke (2021, p. 330) describe reflexive thematic analysis as a purely qualitative method that enables researchers to organise and describe themes or patterns within datasets in detail. Reflexive thematic analysis requires the researcher to be reflexive, subjective and

creative in constructing knowledge (Byrne, 2022, p. 1392). Thus, aligning with Braun and Clarke's descriptions of reflexive thematic analysis, it was utilised as the research design for a qualitative multiple case study, which can be applied to all forms of written and visual material.

Saldañha (2020, p. 879) further explains that thematic analysis aims to understand the socio-cultural context and structural conditions that enable the development of individual accounts and allow for the social and psychological interpretation of the data. In this view, the objective of the data analysis process was to gain insight into and understand the role of school ecology in facilitating resilience in adolescent learners with writing difficulties. The aim was to identify and extract significant themes emerging from participant depictions, opinions, and views on facilitating resilience in adolescent learners (Byrne, 2022, p. 1400).

According to Byrne (2022, p. 1392), a theme is defined as a specific pattern of meaning discovered in the data. Braun and Clarke (2022, p. 16) recommend that a theme captures crucial aspects of the data in relation to the research question and portrays these aspects as a level of organised responses or meaning within the dataset (Byrne, 2022, p. 1395). Applying this understanding enabled the identification of relationships, patterns, and categories that emerge in each case, as well as the comparison of these themes across the cases (Byrne, 2022, p. 1396). Naeem et al. (2023, p. 10) emphasise that codes assigned to emerging patterns and responses in the data empower the researcher to address the research question. Thus, codes were assigned accordingly. The guidelines for primary inductive reflexive thematic analysis proposed by Braun and Clarke (2006), as depicted in Figure 4.5 below, were thoroughly observed to analyse the data.

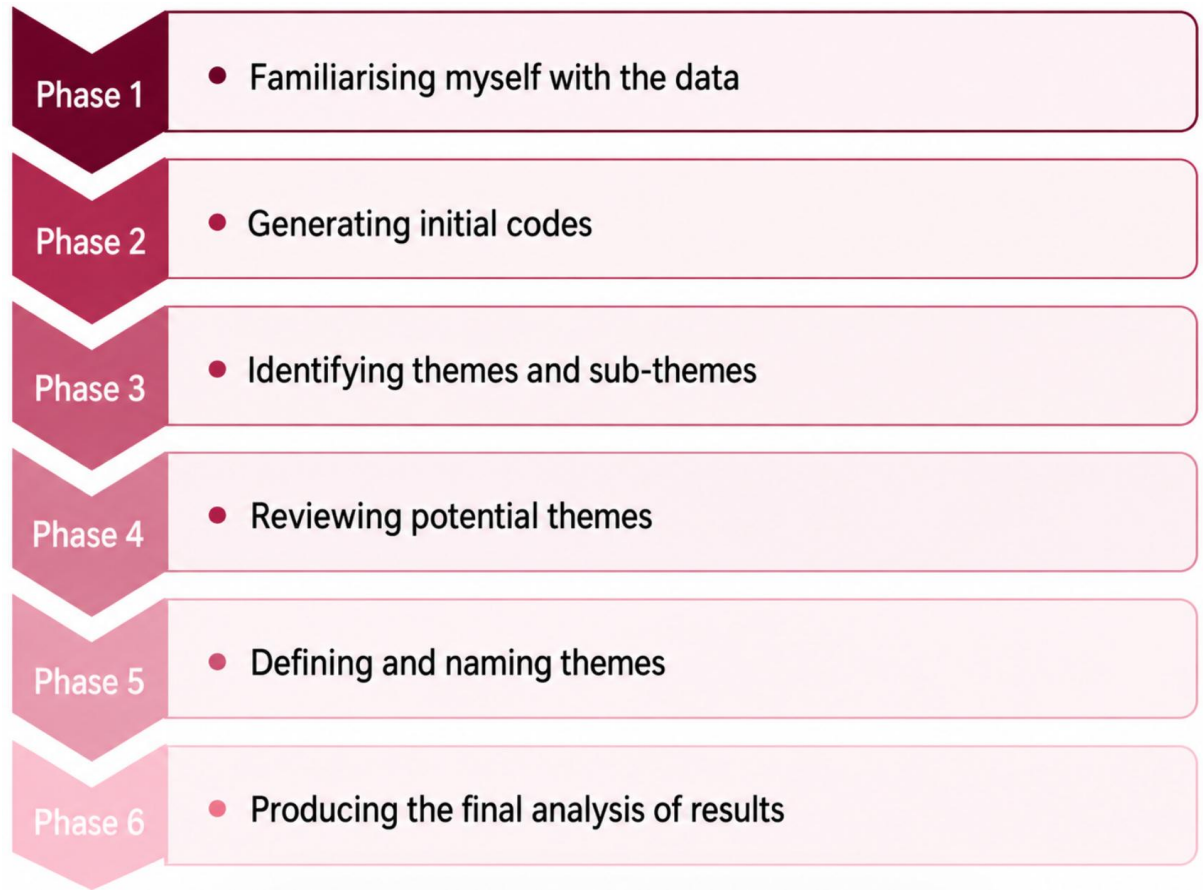


Figure 4.5: Process of primary inductive reflexive thematic analysis

Source: Braun & Clarke (2021, p. 331)

4.4.3.1 Phase 1: Familiarising myself with the data

According to Braun and Clarke (2021, p. 331), 'familiarisation' is the first phase in analysing the data. Familiarisation involves reading and re-reading each dataset to become thoroughly acquainted with the data. This step is essential to identify information that may be pertinent to the research questions. Once the datasets have been transcribed verbatim, the researcher can proceed to immerse themselves in the data. While the researcher may not transcribe the data, it is good practice to listen to the audio recording to gain a clearer understanding. Hence, in this phase, after organising the various datasets, consisting of transcribed interviews, photographs, and field notes, I, the researcher, repeatedly reviewed and studied the data to familiarise myself with it and immerse myself in it (Byrne, 2022, p. 1398). Immersing myself in the data enabled me to develop insights into its nature and identify patterns and meanings related to my research questions (Braun & Clarke, 2021, p. 345). I made notes in the margins to guide my initial sorting process (Lester et al., 2020, p. 96).

4.4.3.2 Phase 2: Generating initial codes

Coding is the process that involves creating concise, descriptive, or interpretive labels for pieces of information relevant to the research question(s). Braun and Clarke (2021, p. 331) state that it is advisable for the researcher to systematically examine the entire dataset(s), giving equal attention to each data item and identifying information which stands out in the data that is intriguing and potentially useful for developing themes. To execute this phase, I initiated the coding process by methodically examining the data to identify significant elements across all datasets. As I analysed the data to create meaningful codes, I made marginal notes and highlighted comparable patterns across the datasets. This procedure enabled me to efficiently group the data within each specific code (Byrne, 2022, p. 1399; Flick, 2023, p. 416).

4.4.3.3 Phase 3: Identifying themes and sub-themes

This phase commences once all relevant data items have been coded. The emphasis shifts from interpreting individual data items to interpreting all generated codes as aggregated meanings across the dataset(s). The coded data is reviewed and analysed to explore how different codes can be combined based on shared meanings, leading to the formation of themes or sub-themes. This process involves merging multiple codes that share a similar underlying concept or feature into a single code, or recognising that a specific code may represent a broader narrative within the data and can be established as a sub-theme or part of a general theme. In light of this understanding, after generating the initial codes, I organised them into possible categories, broader themes, and sub-themes, bringing together all the collated data that fit a potential theme (Braun & Clarke, 2021, p. 331; Dawadi, 2020, p. 63). The data is organised into identified, related groups and patterns using colour-coded categories (see appendix B).

4.4.3.4 Phase 4: Reviewing potential themes

Next, I reviewed and refined the preliminary themes and sub-themes derived from the collated coded data until I was satisfied with the categorisation of the themes within each dataset (Braun & Clarke, 2021, p. 331). I employed an inductive approach, which involves moving back and forth between themes, categories, and sub-themes to detect recurring patterns across datasets, thereby establishing a comprehensive set of themes across all datasets (Byrne, 2022, p. 1404; Dawadi, 2020, p. 63). I refined the themes and integrated new sub-themes to strengthen the emerging themes. This process concludes the evaluation of the proposed themes in relation to both the coded data items and the entire dataset.

4.4.3.5 Phase 5: Defining and naming themes

At this stage, the researcher is required to present a comprehensive outline of the thematic framework. Each theme and sub-theme is to be articulated in relation to both the dataset and the research question(s). While each theme should offer a coherent and internally consistent account of the data that is distinct from other themes, all themes should collectively form a clear and cohesive narrative that aligns with the dataset and is informative with respect to the research question(s) (Braun & Clarke, 2021, p. 331; Braun & Clarke, 2022, p. 13). To achieve this, an ongoing examination was carried out to 'define and refine' the specifics of each theme to generate a classification system that outlines what each theme and sub-theme entails and which aspects of the data they capture. This was accomplished by thoroughly reviewing each theme in relation to the coded extracts and to other themes to avoid overlap (Byrne, 2022, p. 1407). At this point, each theme can be given a working title and assigned a final name.

4.4.3.6 Phase 6: Producing the final analysis of results

The final analysis and write-up of the report involved selecting vivid extracts from the data and conducting a comprehensive analysis of these extracts, which allowed me to relate them to the research questions and literature (Braun & Clarke, 2021, p. 331; Naeem, 2023, p. 11). I also developed inclusion and exclusion criteria that guided the composition of each theme. As a student qualitative researcher, I found thematic analysis to be an accessible, flexible, user-friendly, and unobtrusive method that enabled me to provide a rich and detailed account of the data (Byrne, 2022, p. 1409). By following a primary inductive thematic analysis approach, I generate my findings from significant themes that emerge within the raw data without any objective restraints, thus permitting the generation of unanticipated insights (Byrne, 2022, p. 1409).

While thematic analysis is valuable for summarising key aspects of large datasets, its flexibility can pose a challenge, as it permits a wide range of analytic options (Braun & Clarke, 2021, p. 331). This flexibility can lead to overlap between themes, which may not always align with analytical claims. To mitigate this, I referred to the research questions and ensured my analysis remained focused, frequently consulting my supervisor to aid in this process. Additionally, the coding and analysis process is time-consuming, so I allocated specific time to work through the analysis. A further limitation of thematic analysis is that the coding process is demanding and time-intensive, as there are no standardised categories at the outset (Naeem, 2023, p. 7). To address this challenge, I set aside sufficient time in my research schedule for the coding process.

4.5 RIGOUR

Kakar et al. (2023, p.151) emphasise that an essential factor influencing the rigour of qualitative research investigations is trustworthiness. Trustworthiness, as an overarching quality criterion, can be comprehended as "the degree to which the reader can assess whether the researchers have been truthful in how the research was executed and reasonable in the conclusions they draw" (Cloutier & Ravasi, 2021, p. 114). While validity and reliability have been utilised as criteria to verify the integrity of an inquiry in quantitative research, to ensure the soundness of qualitative research, trustworthiness is crucial in establishing the credibility and reliability of qualitative findings, given their subjective nature (Ahmed, 2024, p. 2; Babbie, 2020, p. 413). Given the interpretivist nature of the study and the adoption of a qualitative research approach as the methodological paradigm, utilising a multiple case study design; and various data generating techniques, the criteria for judging the trustworthiness as proposed by Lincoln and Guba (1985) include credibility, transferability, dependability, and confirmability (Adler, 2022, p. 599); these four aspects are examined, and I explain how they were applied in my study.

4.5.1 Credibility

The criterion of credibility questions the extent to which a study holds truth-value. According to Stahl and King (2020, p. 26), credibility in qualitative research is defined as the confidence that can be placed in the truth of the research findings. Essentially, credibility aims to determine whether the research findings align with the perceived social reality, ensuring correspondence between the researcher’s viewpoints and the social constructs presented by the study (Johnson et al., 2020, p. 141). Saldaña and Omasta (2022, p. 243) simplify this concept by describing credibility as the process by which the researcher ensures that data collection and analysis were conducted accurately, preventing any significant data loss during the research. It is a crucial aspect that bridges the gap between what the researcher establishes and what the reader perceives (Stahl & King, 2020, p. 26). To enhance research credibility, Saldaña and Omasta (2022, p. 244), along with Maree (2019, p. 44), propose various methods, such as prolonged engagement in the field, persistent observation, triangulation, peer debriefing sessions, personal reflective notes, member checking with participants, and providing detailed descriptions.

Firstly, triangulation involves using multiple methods or data sources in qualitative research to achieve a thorough understanding of the phenomena being studied (Stahl & King, 2020, p. 26). It is also viewed as a strategy that enhances the reliability and validity of research findings by examining the convergence of data from various data sources (Bans-Akutey & Tiimub, 2021, p. 2; Stahl & King, 2020, p. 26). Methodological and data-source triangulation are

relevant to this study, as they involve using various data-generating techniques collected from different research sites and different participants at each site (teachers, parents, and school-based professionals). The data generation techniques applied include semi-structured interviews, documents, and observation field notes. These have been employed to examine and observe the research question from multiple perspectives that may be aligned (Busetto et al., 2020, p. 3). The objective is to identify if similar results emerge from these different sources. Hence, after all the interviews were transcribed, participants were given the opportunity to verify the transcriptions, to ensure that the written information accurately reflects their intended meanings and is not fabricated. This process also enables the correction of any misinterpretations and the clarification of any omitted details (i.e., member checking) (Enworo, 2023, p. 377).

Secondly, debriefing entails discussing experiences and findings with the research supervisor to gain clarity, enhance self-reflection, and verify the data being gathered (Flick, 2023, p. 496; Stahl & King, 2020, p. 27). The researcher engaged in regular debriefing sessions with her supervisor to monitor the data analysis and interpretation process (Simoni et al., 2019, p. 2186). This also involved obtaining assistance from the supervisor to review transcriptions and field notes, ensuring a connection between codes, themes, and data groupings. To further enhance credibility and ensure authenticity, only detailed descriptions are extracted from the data sources, thereby relying on the participants' exact responses (Hines et al., 2022, p. 4).

Thirdly, regarding prolonged engagements in the study, the researcher requested that all participants attend a briefing session prior to the semi-structured interviews (Flick, 2023, p. 496). The purpose was to clarify the context of the topic, allowing participants to ask questions or clarify any terms they did not understand. Additionally, the use of thick descriptions during semi-structured interviews allows participants to provide detailed explanations, examples, and opinions (Babbie, 2020, p. 318).

4.5.2 Transferability

According to Nieuwenhuis (2019, p. 144), transferability refers to the extent to which a study's findings can be applied to other settings or groups in different contexts. While the generalisability of the results may be affected by the representativeness of the sample size, to ensure the transferability of this study, detailed descriptions were provided of the research design, culture, and context, as well as the selection and characteristics of the participants involved (Hines et al., 2022, p. 4). This includes comprehensive descriptions of the perceptions of teachers, parents, and school-based professionals participating in the study. The data generated from the study aims to yield rich, descriptive findings (Naeem, 2023, p. 11). Although the purpose of an interpretivist, qualitative study is not to generalise findings, it is the

researcher's responsibility to provide the contextual features of the study that enable readers to make informed judgments about transferability (Enworo, 2023, p. 374). To this end, a comprehensive account of the research process is provided, including the analysis and interpretation steps, so that others can examine the choices made, the methods used in analysis, and the reasoning behind specific interpretations (Babbie, 2020, p. 414). Furthermore, purposeful sampling was utilised, which highlights the characteristics of the participants and the specific site chosen for the study (Flick, 2023, p. 165). The use of purposeful sampling defined the criteria for participant selection, allowing readers to identify similar individuals, contexts, and events that could facilitate resilience through tailored teaching and learning practices within the school ecology.

4.5.3 Dependability

While credibility and transferability are often associated with internal validity, the term 'dependability' is preferred over reliability in qualitative research (Nieuwenhuis, 2016, p. 124). According to Nieuwenhuis (2019, p. 145), dependability refers to the stability of research, which includes the research design, implementation, data-gathering techniques, and reflective appraisal of the project. Furthermore, Nieuwenhuis (2019, p. 145) emphasises that in qualitative research, changes in research design, data sources, and data-gathering techniques are often expected and acceptable to strengthen the study. Additionally, dependability considers whether the study's findings would be similar if the study were replicated (Babbie, 2020, p. 246). Stahl and King (2020, p. 27) further note that although the same findings cannot be guaranteed in other contexts or with different participants, change is acceptable and expected within qualitative research. To meet the criterion of dependability, strategies such as triangulation, member checking, code recoding and a thick audit trail are recommended (Busetto et al., 2020, p. 7; Flick, 2023, p. 496).

To establish the dependability of the research, thorough documentation of the data, methods, and findings was provided, enabling other researchers to determine whether the study can be replicated in a different context with similar participants (Enworo, 2023, p. 377; Nieuwenhuis, 2019, p. 14). This research aimed to report and record the research process in detail, providing a comprehensive account of the analysis and tracking the codes generated from the data. This transparent coding process enhances the reliability of the research by allowing for inter-coder verification to track changes in the recoding and relabeling process, thereby ensuring coding consistency (Busetto et al., 2020, p. 7). Additionally, regular consultations were held with the supervisor throughout the analysis process to avoid misinterpretation and to receive suggestions for further analysis. This further enabled coding and recoding the raw data, as well as comparing and recording the emerging themes and subthemes. Keeping a detailed record of the analysis and obtaining feedback provides an audit trail and enables other

researchers in the field to understand the rationale behind the decisions and potentially replicate the study.

4.5.4 Confirmability

Confirmability refers to the degree of neutrality and the extent to which research findings accurately represent the voices of participants and are free from researcher bias (Nieuwenhuis, 2019, p. 145). Although the risk of researcher bias may be unavoidable, it is essential to acknowledge its presence and take precautions to mitigate it. Since the present study utilised data collected through interviews, photographs, and field notes, there was direct interaction with the participants. Thus, direct involvement with participants in this instance may pose a risk of researcher bias to some extent (Nieuwenhuis, 2019, p. 145). Literature suggests that confirmability can be attained in a qualitative study through conducting an audit trail detailing how the outcomes of the study were obtained, writing in a reflective journal to reflect on personal opinions, sentiments and ideas, and lastly, carrying out triangulation (Ahmed, 2024, p. 2; Donkoh & Mensah, 2023, p. 7). Confirmability was established through an audit trail (Flick, 2023, p. 497), which provided evidence of what transpired during data generation. The researcher also utilised a reflective note as part of the field notes for personal reflection. This allows researchers to expose any preconceptions and acknowledge any prejudices they carry (Flick, 2023, p. 400). Donkoh and Mensah (2023, p. 8) validate the importance of deliberating our knowledge, as it reduces the possibility of bias in a study. Lastly, evidence of recordkeeping, together with data interpretation, was provided, which permitted an account of how the meaning and findings of the study were construed.

4.6 ETHICAL CONSIDERATIONS

When conducting a research study, it is imperative to consider the fundamentals of ethical research. Since human participants are often viewed as a customary source of information in most studies, adhering to ethical conduct and taking accountability are crucial (Goodwin et al., 2020, p. 27). Ethical considerations involve identifying, assessing, and understanding what is considered appropriate and inappropriate behaviour when working with participants. This means making choices that ensure participants are treated fairly. Ethical considerations receive heightened attention as they guide researchers' actions towards professionalism, responsibility, respect, and caution during the data generation process and when interacting with participants (Poth, 2023, p. 181; Sobočan et al., 2019, p. 808). In addition, according to Sobočan et al. (2019, p. 809), these factors help regulate and apply principles that prohibit individuals from being forced to act against their will. Thus, to safeguard both the researcher and the participants during such events, being sensitive to ethical imperatives throughout the research process (Sobočan et al., 2019, pp. 808–809), includes:

1. Providing a clear outline of the study's purpose, either in writing or verbally, to ensure participants understand how their information is utilised.
2. Securing written consent for the dissemination of information gathered in the study.
3. Informing participants about the data generation techniques and the timing of these procedures.
4. Sharing precise transcriptions, interpretations, and findings derived from the study with participants.
5. Prioritising the protection of participants' rights and safety when writing the research report.
6. Obtaining the decision surrounding participants' anonymity in the study (Creswell & Creswell, 2023).

4.6.1 Voluntary participation and informed consent

Informed consent is an ethical obligation for researchers undertaking a research study (Klykken, 2022, p. 795; Millum & Bromwich, 2021, p. 10). The process of obtaining informed consent involves specific elements, including disclosing information, assessing decision-making capacity, and ensuring voluntariness. Disclosure requires the researcher to provide participants with the necessary information to make an informed decision about whether to participate in the study. This includes the study's purpose, the procedures used, and any potential risks, anticipated benefits, or conflicts that may arise. The capacity for decision-making allows participants to make an informed choice about their participation based on their understanding of the information provided by the researcher, while voluntariness ensures that participants provide written consent to participate without being coerced or influenced in any way (Badampudi et al., 2022, p. 3; Goodwin et al., 2020, p. 31; Zhong et al., 2019, p. 1). Before gathering any data, researchers must obtain participants' permission. Interviews and fieldnote observations can only happen once consent has been given (Klykken, 2022, p. 796). Table 4.10 outlines the criteria to ensure informed consent.

Table 4.10: Ensuring informed consent

Criteria of informed consent	Implications for the study
Competence	The researcher included responsible and knowledgeable individuals who are able to make valid choices, given the necessary information about the study.
Voluntarism	Consent forms were provided, and the option to participate in the study was offered to schools' participants and parents (via permission slips). Furthermore, all parties involved had the right to withdraw at any time without facing any prejudice.
Disclosure	The consent forms provide essential details about the study. This includes how the researcher would conduct the study, the reasons for conducting the study, the risks involved, the benefits of participating, and the dissemination of the final outcomes of the research.
Capacity for decision making (Comprehension)	Ensuring that all participants comprehend the nature of the study, the consent letters thoroughly detail what the study entails.
Permission	Principals, teachers, parents, and school-based professionals were provided with consent forms.

Source: Zhong et al. (2019, p. 1)

4.6.2 Confidentiality and pseudonyms

Anonymity and confidentiality are essential components of research as they help ensure the generation of high-quality results while maintaining objectivity (Kang & Hwang, 2023, p. 1). While confidentiality refers to the details of how data will be used, who will have ownership of it, and how it can be retrieved (Goodwin et al., 2020, p. 35), Kang and Hwang (2023, p. 2) also explain that the aspect of confidentiality involves removing or altering any personally identifiable information provided by participants and included in the data. In this instance, participants were assured that only the research team would have access to the data. Furthermore, once the study concluded, all the data gathered were securely stored and protected. Anonymity involves removing any personal identifiers of participants (Hoft, 2021, p. 223). When reporting the findings, participants' identities and responses are protected by using pseudonyms, ensuring that no one reading the outcomes can identify which individual shared a particular opinion or viewpoint (Badampudi et al., 2022, p. 16).

4.6.3 No harm or risk to participants

As a researcher, it is of paramount importance to take responsibility for protecting participants' well-being by recognising and identifying any foreseeable risks of harm (Nii Laryeafio & Ogbewe, 2023, p. 95). The act of deception, whether deliberate or unintentional, is a matter of contention (Creswell & Plano Clark, 2023, p. 154), as it has the potential to violate human rights and expose participants to the risk of harm (Kang &

Hwang, 2021, p. 5). Thus, care should be taken to avoid any foreseeable risk of harm or deception to participants. Although this study does not involve any risk of deception, the safety of all participants was ensured throughout the study (Creswell & Plano Clark, 2023, p. 154) by taking measures to prevent any harm. Participants were only required to share their opinions on the topic, and the researcher refrained from interfering in any way that could potentially cause harm. Secondly, all interviews with participants took place in an environment that was familiar to them and where they felt safe. For all participants, including parents and school-based professionals, the interviews were conducted on the school premises. Some of the risks involved include:

- Participants may feel self-conscious or anxious about answering interview questions, as a sense of discomfort may occur when providing sensitive information to the researcher. To mitigate this risk, a brief contact session was held with the participants to inform them about the study, explaining its purpose, aims, and their role in the study. In doing so, participants were able to gain a general sense of what is expected and required, which may ease any discomfort and aid in building trust.
- Participants may feel uncomfortable or stressed when expressing themselves in ways that might make them feel less than competent as teachers, parents, or therapists. Participants were given the opportunity to set a date and time/or reschedule the interview, for a day and time that they felt was most convenient and comfortable with. Participants were reassured that the study is not intended to judge their competencies as teachers, parents, or school-based professionals, but rather to learn from their expertise and individual ways of engaging with learners who experience writing difficulties.
- Participants feel uncomfortable communicating in a language which may not be their home language. All participants were approached beforehand and asked if they were comfortable expressing themselves in English. However, signing the consent form indicates participants' agreement to communicate in English.

Essentially, ethics addresses the question: What surrounds moral conduct when undertaking a research study? For this study, the ethics approach began with seeking ethical clearance from the College of Education Research Committee at UNISA to ensure compliance with regulations and procedures. Subsequently, permission was obtained from the GDE, principals, teachers, school-based professionals, and the parents of the adolescent learners identified for the study, through consent forms (see Appendices F–J). Table 4.11 outlines the overall process for applying ethical considerations and indicates the research stage at which each step was taken.

Table 4.11: Ethical considerations

Stage in the research process	Description
Prior to the study	• Identified a research problem that pertains to the actual experiences of participants • Obtained ethical clearance from the university's (UNISA) ethics committee • Obtained approval from GDE • Identified potential mainstream schools and special needs education schools which cater to adolescent learners
At the beginning of the study	• Approach the intended participating high schools • Explain the purpose and objective of the study • Determine the disposition of teachers, parents, and school-based professionals to participate in the study • Obtain required approvals from the school and participants by providing consent letters • Ensure participation is entirely voluntary • Schedule a timeline/dates for interviews with the participants
Data generation phase	• Respect the research site and refrain from disturbing the surrounding environment • Show respect and integrity towards all participants throughout the study • Refrain from manipulating, exploiting, or using participants for personal gain • Avoid generating any information that could potentially cause harm to the participants
Data analysis phase	• Maintain an objective stance during analysis and revisit one's own assumptions to ensure impartiality • Avoid divulging only positive or only negative outcomes • Uphold the privacy and anonymity of participants with full confidentiality
Reporting, disseminating and storing of datasets	• Avoid engaging in plagiarism, falsifying writing, or fabricating data, proof, findings and conclusions • Prevent the dissemination of incriminating or maleficent information • Utilise unambiguous and appropriate language in both written and verbal communication • Make datasets available for review • Retain original datasets and keep securely stored as required by UNISA • Avoid duplicating any publication, even in partial form

Source: Creswell & Plano Clark, 2023, p. 498)

4.7 CONCLUSION

Chapter 4 provided a comprehensive account of the research design and methodology applied in this study. It commenced by outlining the components of the research paradigm, which guided the discussion of interpretivism, the research approach, and the research type, featuring a qualitative design and multiple-case study approach. Purposeful sampling was employed to select participants from schools in the Gauteng Province. Data collection techniques included semi-structured interviews, high-quality photographs, and informal observation field notes, all of which align with the theoretical frameworks which will be used to interpret the data. The chapter proceeded to discuss data analysis through inductive thematic analysis, concluding with a discussion of how trustworthiness was ensured and ethical considerations were addressed. The subsequent chapter presents the data and findings on how the school ecology facilitates resilience in adolescent learners' teachers, from which potential recommendations are derived.

CHAPTER 5

RESULTS OF EMPIRICAL RESEARCH

The content of Chapter 5, along with the relative positioning of its topics, is depicted graphically in Figure 5.1 below.

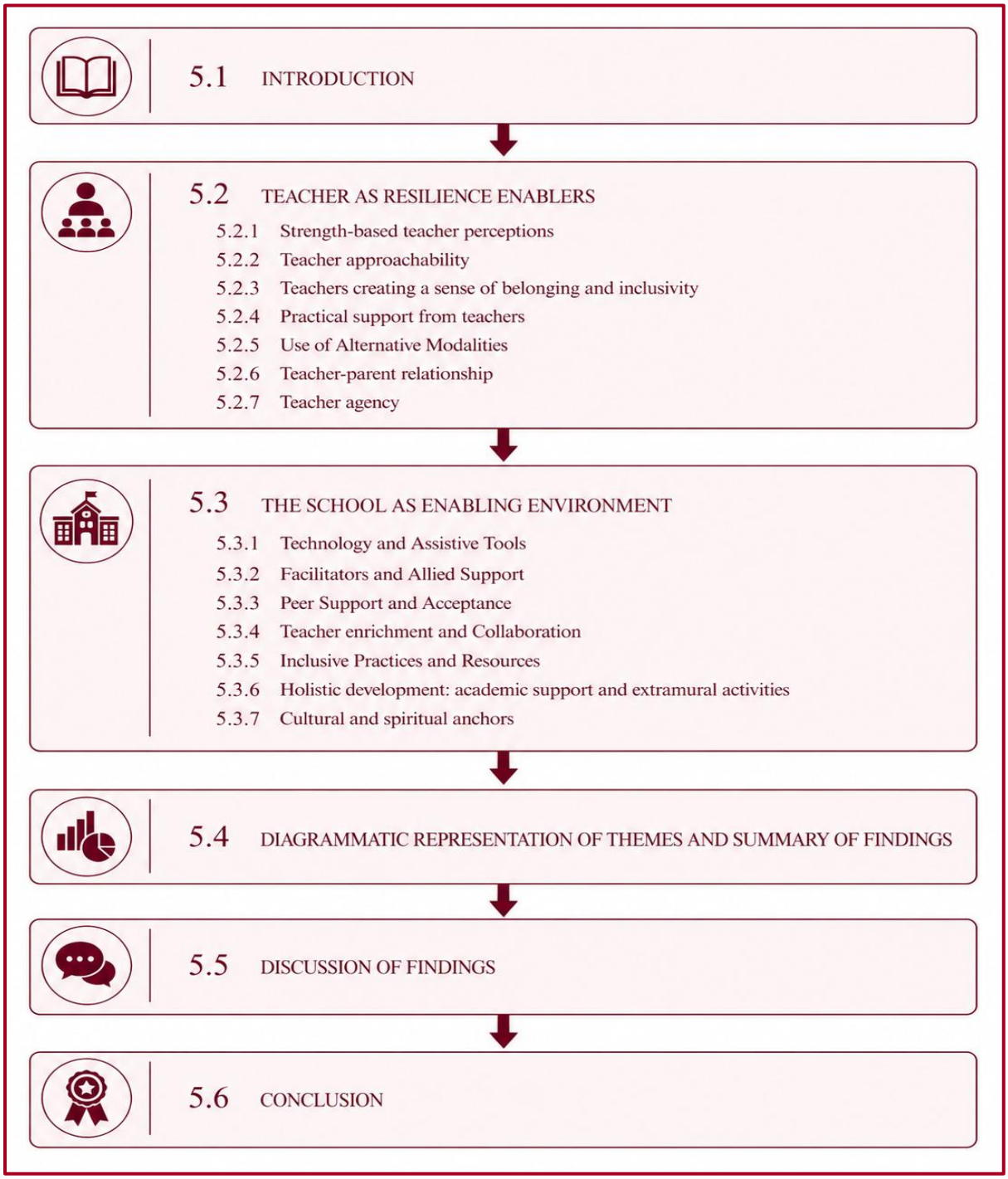


Figure 5.1: Overview of Chapter 5

5.1 INTRODUCTION

This chapter presents the findings of the study (School A and School B). The purpose of this chapter is to report and interpret data collected from parents, teachers, and school-based professionals (i.e., OTs and educational psychologists) regarding the factors and processes within the school ecology, that facilitate and promote resilience among learners with writing difficulties in the school context. In both cases, stakeholders who formed part of each learner's ecological support system participated in the study. To maintain confidentiality while ensuring analytic transparency, participants are referred to using the coding system outlined in Chapter 4 (see sections 4.4.1.3, 4.4.1.4 and 4.4.1.5). Each code indicates the participant's role, the case to which they belong, and their numerical identifier within that role.

For example, Teacher A.2 refers to the second teacher at School A, while Therapist B.1 refers to the therapist interviewed at School B. This system enables meaningful within-case and cross-case comparisons, particularly regarding how different stakeholders perceive and contribute to the resilience of the learners with writing difficulties within their respective school ecologies. Participant voices are presented verbatim to foreground their lived experiences, while the coding structure ensures their anonymity throughout the chapter.

The findings are organised into thematic categories that emerged from the analysis of interviews, field notes, and visual data. The themes were clustered into two categories: (1) teachers as enablers of resilience and (2) the school as an enabling environment. These categories reflect the multi-layered support systems influencing learner resilience. Below follows a discussion of the themes and subthemes of the research findings. Each starts with a brief definition to ensure clarity.

5.2 TEACHER AS RESILIENCE ENABLERS

Teachers as resilience enablers refers to teachers who are actively supporting learners' capacity to adapt and thrive despite adversity by fostering access to protective resources, modelling coping strategies, and creating supportive, structured environments that promote agency, hope, and belonging within a socio-ecological framework (Mohangi, 2023, p. 45; Theron, 2018, p. 203; Ungar et al., 2019, p. 1–2). According to Brandmiller et al. (2024, p. 1408), teachers often influence their learners' perceptions of their own talents and abilities. Therefore, it can be concluded that when the teacher's feelings towards the learners are positive, learners are more likely to achieve positive results.

5.2.1 Strength-based teacher perceptions

Strength-based teacher perceptions are the intentional focus on learners' abilities, talents, and potential rather than their limitations or difficulties (Ma, 2021, p. 4). This theme emerged

strongly across both schools, where participants consistently affirmed learners with writing difficulties as capable individuals with unique strengths. Rather than adopting a deficit lens, teachers emphasised learners' motivation, creativity, and interpersonal qualities as central to their educational experience.

Teachers at School B described learners as determined and socially engaged, even though they experienced challenges at school. For example, Teacher B.4 highlighted Sammy's perseverance:

"… she is eager to do all her work, it just takes her a long time to do." (Teacher B.4, pages 21–22)

Similarly, Teacher A.3 challenged stereotypes linking LD to behavioural issues:

"I find that they're [learners with writing difficulties] also very helpful, and they're sweet learners. Like they have that, a personality that's very attractive instead of being, you know, the ones that I have, they're not rebellious because they have issues, they just seem somewhat caring and loving children." (Teacher A.3, page 6)

These comments demonstrate a strength-based perspective, prioritising learners' positive qualities over their writing difficulties. Beyond personality traits, the participants identified creativity (see photograph 5.1 and 5.2), verbal ability and emotional intelligence as key assets of learners' resilience. When asked what would help in improving the educational experience of the learner going forward, Teacher A.2 suggested graphic design as a future career for a learner (Adam) with strong artistic skills:

"… Like, okay, the school is not their cup of tea, but like this learner draws well. So maybe graphic design will be a field for the learner to pursue. And they can do well." (Teacher A.2, page 12)

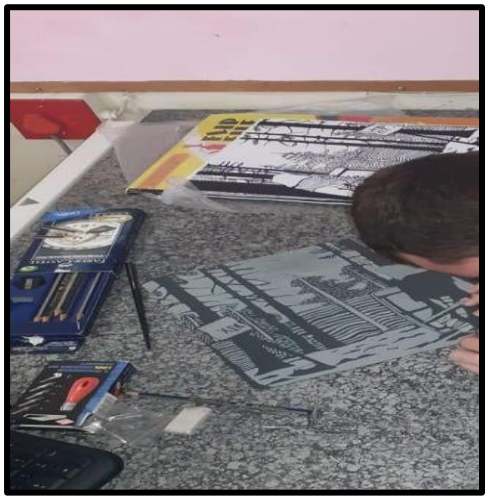
Furthermore, Teachers A.3 and A.4 echoed this sentiment, emphasising the artistic ability and communication skills of the learners in School A. Their responses to questions about unique characteristics of learners with writing difficulties consistently highlighted these attributes:

"But the one (Adam) does exhibit the more artistic views, does have that abilities there… Creativity, I think." (Teacher A.3, page 6).

"Like they might have strong communication skills." (Teacher A.4, page 6)



Photograph 5.1: Woodwork display showcasing artistic skills (School A)



Photograph 5.2: Displaying artistic ability through sketch art (School A)

Learners' social engagement and creativity were also observed through artistic displays used as resources in the school corridors (see photograph 5.3 and 5.4):

"The school has long corridors with various interesting educational, religious and motivational artwork on the walls." (Field notes, School B, page 23)



Photograph 5.3: Geographical map of South Africa as an artistic expression and resources for learning in the school corridor (School B)



Photograph 5.4: Artistic expression of the solar system on the wall in the school corridor (School B)

Drawing from the data generated, these insights demonstrate that teachers adopted a non-deficit perspective, actively recognising and nurturing learners' strengths as a resilience-building strategy.

5.2.2 Teacher approachability

Teacher approachability refers to the perceived openness and accessibility of a teacher, characterised by their willingness to listen, respond empathetically, and create a safe, non-judgmental environment where learners feel comfortable seeking help, asking questions, and expressing concerns (Abate et al., 2024, p. 12). Seeking help and support is recognised as a protective factor that promotes resilience, provided the support is culturally and contextually meaningful (Ungar, 2011, p. 6; Ungar, 2021, p. 120).

In the findings, the teachers' availability and emotional responsiveness emerged as critical enablers of such meaningful support. When asked for examples of how the learner has demonstrated resilience in overcoming the challenges she experiences every day, Parent A.2 shared that Maryam felt the environment was a safe space to request assistance when needed. Teacher A.2 reported:

"…usually she (Maryam) asks for help if she can't sort of maybe do a certain activity, she will ask you know, how to do it." (Parent A.2, page 4)

Similarly, Teacher A.5 confirmed:

"…you know, and there were times when she (Maryam) had some queries to just find out, look, she's not sure about this and that. And she has asked me." (Teacher A.5, page 10)

At School B, Teacher B.7 described a learner's proactive engagement:

"…for example, she (Sammy) just carried on attending her extra classes…, asking people to help her, and you can see her blossoming now, she really has overcome those challenges." (Teacher B.2, page 5)

During the researcher's visits to School A, while seated on the school grounds observing the overall school dynamics and interactions, learners appeared to have a positive relationship with their teachers, as they would often approach them during break or at various times throughout the school day to seek assistance or make their needs known.

"The learners are not afraid to ask and have a willingness to achieve." (Field notes, School A, page 6)

From this observation, it is clear that learners have a good relationship with their teachers and are not afraid to seek help.

5.2.3 Teachers creating a sense of belonging and inclusivity

A sense of belonging refers to fostering an environment where learners feel emotionally secure, valued, and connected to their peers and teachers. It emphasises interpersonal relationships and classroom dynamics that promote confidence, participation, and positive

self-image (Dost & Mazzoli Smith, 2023, p. 822). Promoting an environment where learners feel individually acknowledged enables learners to take ownership of their learning, enhances motivation, and empowers their learning experience (Du Toit-Brits, 2022, p. 71). Pendergast et al. (2018, p. 6) acknowledge that learners confronted with academic challenges may experience a lowered sense of belonging as compared to their fully achieving peers, thus making it imperative for teachers to establish interpersonal relationships between learners, within the classroom, that support the development of a sense of belonging and inclusivity.

It was found that teachers intentionally created an inclusive and emotionally safe environment where learners felt acknowledged, confident, and motivated to participate alongside their peers. In an interview with Teachers B.3 and B.4, when asked which factors within the classroom buffer or soften the impacts that learners with writing difficulties experience, they both emphasised how a positive classroom environment allowed learners to participate without judgment and gain confidence:

“The fact that we have positive classroom environments where they feel the need, they can raise their hand without feeling ashamed when they struggle.” (Teacher B.3, page 9)

“I think having a positive classroom atmosphere and building the learner’s confidence… you can’t go and show out the mistakes but rather help her with the mistakes.” (Teacher B.4, page 9)

When asked in a follow-up interview how writing difficulties are managed in the classroom, Teacher B.1 mentioned the importance of inclusive support, by acknowledging learners’ academic efforts without penalising them for challenges beyond their control:

“That’s why we get them scribes to write their exams and assessments so that we can read the answers and not penalise them for not being able to see the answer.” (Teacher B.1, Field notes, page 1)

Teachers were enthusiastic about inclusivity and ensured that learners did not feel excluded in the classroom or at any school events or activities. Teacher A.4 told of how learners were always included in school activities, no matter their disabilities:

“There's no exclusion. So whether it is a sports day, whether it's um, a project, whether it's a market day. The learner will always be included, and we will make it in such a way that you know they do the same amount of work as everyone else while getting the assistance they may or may not need for certain things.” (Teacher A.4, page 11)

Further emphasising the concept of inclusiveness, Teacher A.3 described the learning environment positively, stating that:

“The environment is a helpful one, rather than feeling like the environment is also against you when you're helping the child. I think that makes a difference.” (Teacher A.3, page 9)

Parent A.2 also commented that her child, Adam, felt motivated and encouraged at school by his teachers, which allowed him to progress and do better:

“ …because his class is, in a class that's very motivating and encouraging, his teachers are always there, like all his teachers.” (Parent A.2, page 6)

Teamwork, another critical facet of inclusivity and creating a sense of belonging, was utilised by teachers to prevent learner isolation and encourage more fulfilling learning experiences (see photograph 5.5). Teacher A.4 elaborated on this aspect, highlighting her expertise in selecting the groups, the benefit of collaborative participation, and learner agency:

“So anytime there's things that need to be done in groups, I pick the groups so that there's no feelings of isolation… teachers want what’s best for learners…. So if there's something where you struggle, someone else in the group can take responsibility… everyone still contributes.” (Teacher A.4, page 9)



Photograph 5.5: Learners working together in a group project (School A)

When asked how learners are affected by their writing difficulties, Teacher A.5 referred to the case of Maryam, noting that she is influenced in multiple ways due to comorbid difficulties. As a result, other learners do not always choose to work with her, which risks leaving her isolated. To counter this, Teacher A.5, similar to Teacher A.4, also spoke of how she incorporated groupwork to ensure inclusivity among learners:

“In class, if we do group work and you group her [Maryam] up with somebody, then it’s okay, they do work with her.” (Teacher A.5, page 5)

Teacher B.2 further commented on the value of teamwork and how it enables learners with writing difficulties to feel more accepted in the classroom and to take ownership of their learning (see photograph 5.6).

“So I think that (the school environment) creates a sense of belonging for our learners and that they don't feel excluded or that they are standing out.” (Teacher B.2, page 7)



Photograph 5.6: Learners working in a group, creating a sense of togetherness and belonging (School B)

When learners feel accepted and experience a sense of belonging, they are more likely to develop a positive self-image and heightened self-esteem (Allen, 2025, p. 83). Supporting this view, Therapist B.1 explained how the psychological support technique of cognitive reframing can assist learners in navigating their challenges:

“From a psychological point of view… it (cognitive reframing) improves the way that they see themselves and their disability or difficulty.” (Psychologist B.1, page 14)

The teachers adopted a warm, strength-based approach and actively provided hands-on support to learners with writing difficulties to ensure they feel recognised, capable, and socially included, and as a result, create the emotional security needed for resilience to develop over time.

5.2.4 Practical support from teachers

According to Alnahdi et al. (2022, p. 8), teachers who adapt their instruction to the unique needs of learners with disabilities promote both academic achievement and emotional well-being. Teachers across both School A and School B demonstrated a commitment to supporting learners with writing difficulties through personalised and practical strategies such as individual support, task modification, and scaffolding. These strategies not only addressed

academic needs but also contributed to learners' sense of competence and emotional well-being.

5.2.4.1 Individual support

From School A, Teachers A.2, A.3, and A.4 highlighted the importance of individualised support in fostering resilience among learners with writing difficulties. Teacher A.4 described her approach to one-on-one assistance during classroom tasks:

"… whenever there's work to be done… I go to a learner and be like let me help you with this piece and then circle back." (Teacher A.4, page 9)

Similarly, Teacher A.2 acknowledged the value of personalised engagement, stating:

"sometimes the one-to-one interaction… So I'll go to the learner, and we'll try and read the question again or highlight certain things and just re-explain it, and sometimes then it helps to clarify misunderstandings related to the topic." (Teacher A.2, page 6)

Teacher A.3 elaborated on her efforts to provide focused support*:*

"I had to now sit, individually with him. Try to get him to understand, to attempt to write it." (Teacher A.3, page 3)

Observations at School B further reinforced this theme of individual support. Despite the demands of curriculum delivery and administrative responsibilities, teachers were seen to prioritise individual attention as noted in the researcher's field notes:

"While the curriculum and admin work is a lot for all teachers, the difference for learners in a special needs environment is that they receive individual attention, which they may not have received in a mainstream environment. There are designated spaces for them to sit in order to receive one-on-one attention." (Field notes, School B, page 16)

To ensure learners receive individual support, many classrooms have an additional desk in front of or alongside the teacher's desk (see photographs 5.7 and 5.8). Teacher B.1 confirmed in a follow-up interview that:

"The learners who struggle the most must sit at the desk in front." (Teacher B.1, School B).

By having learners seated at a designated spot, teachers are better able to provide individual support and follow up on learners' progress throughout the lesson.

Teacher A.4 shared similar sentiments, explaining that placing learners who struggle at the front of the classroom helps them gain a clearer understanding of the work. Since learners with writing difficulties also experience visual-spatial challenges (Azri et al., 2025, p. 104), this positioning provides better visual and spatial access, enabling them to engage more effectively and complete written tasks when necessary.

“I also have the learner sitting closer to the front of the class so it's easier to transcribe from the board if they have to, to their books, because they can see it a little bit better, and because they're in the front, then they can usually start a little bit earlier than those at the back who are still getting their things ready.” (Teacher A.4, pages 9–10)



Photograph 5.7: Designated desk at the front to support learners individually (School B)



Photograph 5.8: Learner’s desk alongside the teacher’s desk to assist the learner through a one-on-one interaction (School B)

The practical support strategies reflected a deliberate effort to provide responsive, individualised support to strengthen learners’ confidence.

5.2.4.2 Task modification and scaffolding

Another strategy the teachers reported using was scaffolding, which they applied individually with learners during class time. Parent A.2 described how teachers would break tasks down to help her child, Adam, stay engaged in his schoolwork:

“They break his work down into small (sections)… focus on this, focus on that … Instead of learning so much, they give him less to learn...” (Parent A.2, pages 6–7)

This approach not only reduced cognitive overload but also helped the learner maintain focus and experience incremental success. She further explained that teachers would intervene during lessons to provide immediate feedback and correction:

“It’s mostly the teachers that will stop him in class and say, okay, fix this or fix that.” (Parent A.2, page 10)

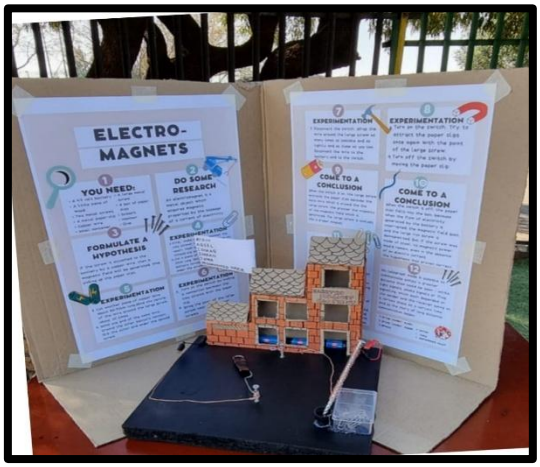
These interactions reflect a responsive and supportive classroom environment where learners are guided in real time, reinforcing their sense of competence and control.

Teacher A.3 also shared how she actively scaffolded learning by working through initial tasks with the learners, then allowing them to work on independently, and the unfinished work in class becomes homework:

“I usually do the first two questions with them and then you know, the rest is then homework or work in class, and then it becomes homework.…” (Teacher A.3, page 3)

In addition, she explained that she modifies tasks to focus on learners’ strengths rather than their deficits (see photographs 5.9 and 5.10). The teacher’s emphasis on acknowledging effort and finding alternative approaches fosters encouragement, adaptability, and a positive self-concept despite the learner’s setbacks:

“I think giving them like additional opportunities or just focusing on the good more than the bad. And, you know, there's the issue. So, you know, this is good, but maybe change this, or, okay, I can see you tried. Just acknowledging the fact that there's something that's good there. And also finding different ways.” (Teacher A.3, page 10)



Photograph 5.9: Non-written alternative assessment (School A)



Photograph 5.10: Practical paired learning as opposed to a written task (School B)

When asked about the specific modifications or accommodations that are available to learners with writing difficulties in terms of assessments and classroom activities, Teacher A.3 further emphasised the importance of providing learners with additional time, while remaining attentive to and responsive to their individual needs:

“They do get extra time to do their work. You're not going to expect them to do it in the same amount of time as other learners.” (Teacher A.3, page 10)

She also highlighted the importance of flexible output formats, such as the use of digital devices like laptops, to reduce the impact of writing difficulties:

“Find other ways. Like, if learners don't need to write something, just find other ways or other means that they can use to produce the same work without having to write…Maybe if they just can't spell, then they can use a laptop or something…I think it would be easier for the learner, and they can produce, they become more confident, I think, if they can produce better work, that their own.” (Teacher A.3, pages 12–13)

These modifications demonstrate a differentiated approach that acknowledges individual learner needs and promotes fair access to learning. Furthermore, this approach helps learners to gain confidence before they proceed independently.

5.2.4.3 Material preparation and accessibility

Teachers used practical strategies to make sure that learners who struggled with writing had learning materials that were accessible and manageable. These efforts involved preparing materials in advance and using tools to reduce barriers related to organisation, presentation, and access (see photographs 5.11 and 5.12). For example, Teacher A.4 explained how, as teachers, they pre-cut notes using a guillotine:

“…the notes, the printed notes, help the most. We can even, um, so what we sometimes do to save them time on cutting and to make it a bit neater is we use the guillotine and we just cut, pre-cut the notes, so they can paste it in already cut and then it eliminates that, okay, now I'm just gonna cut the note however, ...(laughing) because I feel my book is untidy. So it helps their book look a lot more uniform to other learners’ books.” (Teacher A.4, page 10)

Providing learners with worksheets that serve as templates also makes it easier for them to manage necessary written tasks. When asked in a follow-up interview about how writing difficulties are supported in the classroom, Teacher B.2 highlighted the use of worksheet templates that still allow for writing practice without demanding much from the learner:

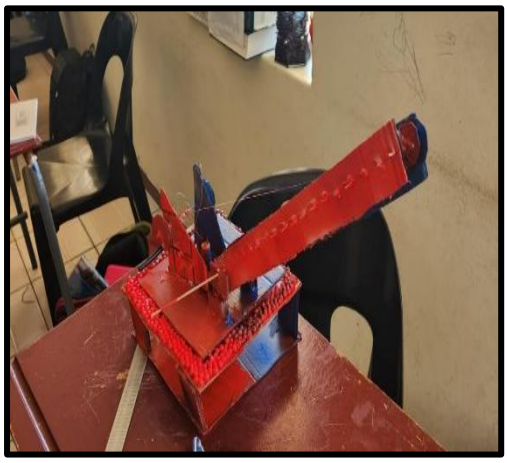
“Providing own worksheets which serve as a template is better, as learners just have to then fill in the answers.” (Teacher B.2, Field notes, page 15)

Similarly, in a follow-up interview, when asked how learners are supported in the classroom, Teacher B.3 explained by way of example how learning and teaching material is prepared and made accessible to learners in order to cater to their needs:

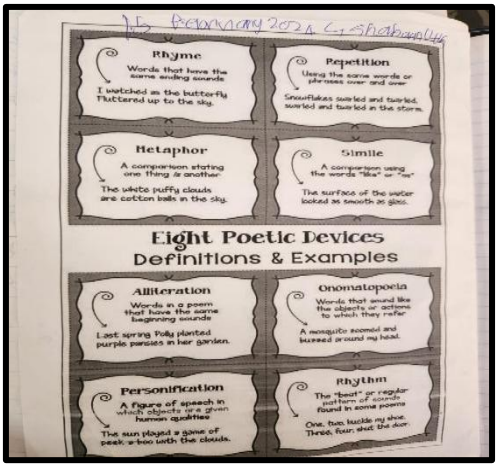
“We prepare and make use of PowerPoints. For example, if the lesson is on shapes, I first ask what they already know about shapes”, to activate prior knowledge, then “we use the textbook or make our own worksheets.” (Teacher B.3, Fieldnotes, page 15)

These accessibility practices support resilience by ensuring learners’ work appears uniform, reducing feelings of inadequacy, and fostering inclusivity, preventing learners from being perceived as different. It also strengthens their sense of belonging and peer acceptance, while

saving time that might otherwise be lost on cutting and pasting notes, allowing for more meaningful learning opportunities.



Photograph 5.11: Instrument referred to as a 'guillotine' used to trim learners' notes, ready for pasting in their workbooks (School A)



Photograph 5.12: Pre-cut notes in English Home Language (School A)

Similarly, to allow for more meaningful learning opportunities and reduce the impact of writing activities, Teacher A.2 explained, for example, how concrete learning materials in subjects such as Mathematical Literacy or Business Studies are used to simplify classroom activities (see photograph 5.13). For instance, in Business Economics, Teacher A.2 would use concrete learning resource materials to help learners understand a concept before guiding them on how to do the written calculations:

"So, depending on the topic, so like when we do packaging, for example, then I'll take a box, and we'd actually pack the things in there. And then I'll tell them how to work it out…" (Teacher A.2, page 8)



Photograph 5.13: Concrete resources and the use of hands-on learning to stimulate learners' thought processes (School A)

This proactive approach also reduced distractions and made it easier for learners to focus on the task at hand without being overwhelmed or distracted by clutter or missing resources.

In School B, a follow-up interview with Teacher B.4 captured another accessibility strategy where teachers recorded study notes and sent them to parents:

"Teachers record study notes and send it to the parents." (Teacher B.4, Field notes, page 20)

This practice extended learning support beyond the classroom by enabling parents to reinforce concepts at home and ensuring that learners had access to content in formats or ways that met their needs.

5.2.5 Use of alternative modalities

Alternative modalities are often used to support learners with writing difficulties, helping them to participate more fairly in classroom activities. Estipona et al. (2025, p. 27) define alternative learning modalities as "various educational approaches aimed at addressing the diverse needs of learners, particularly when traditional face-to-face learning is not feasible." Examples include online learning, different delivery methods in the classroom, blended learning, asynchronous learning between home and school, and individualised one-to-one sessions. The goal of these approaches is to provide effective and engaging learning experiences, especially for learners who face barriers to participation.

Parents, teachers, and school-based professionals consistently emphasised the importance of allowing learners to demonstrate their understanding through alternative modalities, especially when traditional writing activities are challenging. This demonstrated flexible and inclusive teaching that acknowledges that writing is not always the best tool or indicator of what a learner knows, and values different forms of expression.

Verbal responses were widely used as an alternative to written tasks, helping teachers and parents navigate challenging classroom situations for learners with writing difficulties. Teacher B.2 described how she adapted the assessment by asking a learner, Sammy, to read her work aloud:

“So what I did then is I called her to my desk and I let her read me her essay…” (Teacher B.2, page 3)

Similarly, Parent A.1 noted that when she read the homework questions to her daughter Maryam, she [Maryam] could answer them very well orally, as she had trouble putting the same oral response on paper:

“…so when I started reading to her, then she could give it to me orally. She couldn’t put it down on paper; if she put it down on paper, she would leave out certain details, although she had been taught, she couldn’t put it down properly on paper.” (Parent A.1, page 1)

Parent A.2 further added that her son, Adam, was able to respond well orally, as his cognitive thought processes were sound; however, his main struggle lay in transferring those ideas onto paper:

“He doesn't write it in order. He writes it like, like he has an idea in his head, and he thinks that he, it flows well, but when I read it, then it doesn't flow, and he can't understand why it's not right because in his head it's correct, if that makes sense. So he has the whole story correct, and if he tells it to me, then he says it nicely, properly to me, but if he writes it down, it's like very scattered. He tells it to me, then he says it nicely.” (Parent A.2, page 3)

Teacher A.3 affirmed this practice [verbal expression], acknowledging the authenticity of spoken responses in capturing learners’ understanding:

“You know, the story has to be written. But then verbally expressing themselves, which gives you insight into what they're trying to say and sort of like navigating that to get them to write better. Hope that they write better.” (Teacher A.3, page 6)

In addition to verbal expression, teachers also used visual and practical modalities to eliminate the strain of writing difficulties (see photographs 5.14 and 5.15). Teacher A.4 explained how she helped learners sustain focus and understanding:

“…then they can just read, highlight as we go, so then it helps with the seeing and understanding, so it eliminates one of the things they need to do, which is their challenge the writing part and then they can visually see, they can visually listen and then they can listen as they're looking, instead of focussing on writing, listening and looking at the same time.” (Teacher A.4, page 4)

Simplifying tasks and reducing the cognitive load on learners allowed them to focus on comprehension rather than juggling multiple skills simultaneously.

Alongside visual modalities, Teacher A.2 highlighted the importance of physical engagement in completing learning tasks:

“So, depending on the topic, so like when we do packaging, for example, then I’ll take a box, and we’d actually pack the things in there. And then I’ll tell them how to work it out… so that helps when they physically see the instrument that you’re using.” (Teacher A.2, page 9)

Therapist B.1 reinforced this perspective on verbal and practical modalities, cautioning against over-reliance on written work. She explained that learners with writing difficulties often demonstrate strong verbal skills, which can be leveraged to support their learning:

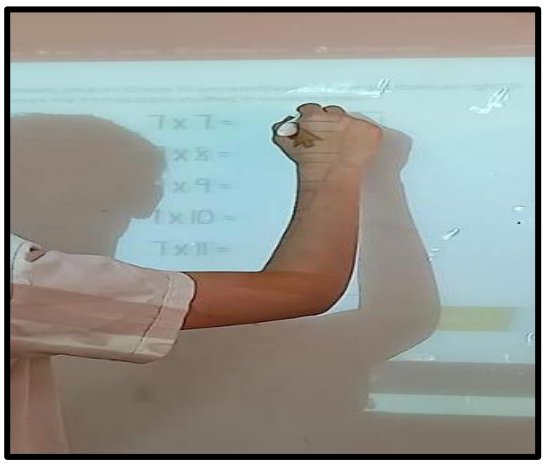
“I've also had kids in the past who are very, um, good verbally and can explain exactly to you what you're asking but as soon as they have to write it, it doesn't come out, so it will be an injustice to take that writing and say that this is what the child knows but actually they know more, they just can't put it on.” (Therapist B.1, page 2)

This sentiment was supported by Teacher B.4, who observed that learners preferred hands-on activities:

“They prefer the practical activities in class because they don’t like writing activities.” (Teacher B.4, page 4)



Photograph 5.14: Practical lesson (School B)



Photograph 5.15: Practical use of the smartboard (School B)

The teachers used a range of multimodal teaching and assessment approaches to accommodate learners’ different strengths and needs. They gave learners opportunities to engage with the content orally, visually, and practically, and as a result, made classroom activities more accessible to learners.

5.2.6 Teacher-parent relationship

According to Mann et al. (2024, p. 102), the teacher–parent relationship can be understood as “a relationship in which both role-players are equally valued for their knowledge, experience, and skills” in supporting children’s education and learning development. Similarly, Mwania et al. (2019, p. 3) assert that successful partnerships between parents and teachers depend on sustained collaboration, mutual support, and shared participation to ensure effective learning outcomes.

From the interviews, it became evident that communication and collaboration between teachers and parents were strengthened through consistent and transparent engagement. Parent A.1, for instance, described how teachers maintained regular contact with the parents of the learners with writing difficulties:

“The teachers support sort of, they know her condition now, so they sort of understand her and support her in that way, and like they keep contact with me sort of, so that you know, we can move forward basically…” (Parent A.1, page 5)

Likewise, Teacher A.5 shared how she initiated communication with parents to manage learners’ challenges better :

“I would approach the parents, you know, to say, look, I'm having this difficulty here...” (Teacher A.5, page 8)

Parent A.2 further explained that teachers communicated with her to collaboratively support her son [Adam] in maintaining focus and successfully preparing for his examinations by breaking his workload into more manageable parts:

“They break his work down into small, they'll come and tell me, okay, focus on this, focus on that, you know, just to help him, like, smaller, but, you know, instead of learning so much, they give him less to learn so that he can focus on that, at least to pass, you know, so then if he can manage more than that, he moves, like, a little bit faster and learns more and he's actually doing okay now.”(Parent A.2, page 7)

During follow-up interviews with teachers at School B, the teacher-parent relationship appeared more structured and deliberate. Teachers implemented several communication channels, including informative sessions at the beginning of the academic year and parent evenings held each term. Teacher B.4, in a follow-up interview, noted that teachers organise: “Informative sessions at beginning of year…and parents’ evening every term.” (Teacher B.4, Fieldnotes, page 22)

This keeps parents informed about school activities and their children’s progress.

Communication extended beyond formal meetings where teachers also engaged with parents through digital platforms, as noted in the follow-up interview with Teacher B.4:

“Teachers have a WhatsApp group with parents or contact them by email…” (Teacher B.4, Field notes, page 22)

These platforms were used to share updates and address concerns as they arose.

It was also observed that parents could request or schedule meetings with teachers during the week, when necessary:

“Parents frequently visited the school to meet with the principal, a teacher or the support staff member.” (Field notes, School A, page 12)

When asked about parent-teacher communication in a follow-up interview, Teacher B.4 mentioned that:

“The teachers also communicate with parents regarding the learner’s progress.” (Teacher B.4, Fieldnotes, page 22)

Thus, this further reinforces the parent-teacher partnership between home and school, streamlining learners’ progress.

5.2.7 Teacher agency

Teacher agency refers to the ability of teachers to act intentionally and constructively to guide their professional growth and development, thereby influencing their teaching environment to better support their learners (Olsen & McIntosh, 2024, p. 1). In other words, they are viewed as active agents in their classrooms, rather than simply passive recipients of professional development. Teacher agency emerged as a key theme in this study.

Teachers A.4 and A.5 highlighted the role of self-directed learning. Teacher A.4 described using platforms like YouTube and Google to explore new teaching strategies and technologies to better assist the learners with writing difficulties in their classroom:

“I don't have that much time for outside courses, but I do look into things like for the technology…I would go and look at YouTube videos or Google to see if someone has come up with a better way…” (Teacher A.4, page 15)

Teacher A.5 told of how modern technology enables her to implement newer teaching and learning methods to better assist learners:

“I'm carrying on still… try to incorporate new methods… with technology being so advanced and with AI and all that..” (Teacher A.5, page 1)

Teacher A.5 also described a problem-solving approach to innovation, emphasising experimentation and reflection:

"…you've got to do some research… trial and error… navigate through all that." (Teacher A.5, page 8)

On the other hand, Teacher A.3, as a member of the SBST, highlighted her role in supporting both teachers and learners by exploring different disabilities and identifying appropriate support:

"I am part of the SBST team, though. So part of our job is to help learners with, or like come up with ways to assist teachers to assist learners. So we do like read up more on disabilities and what can be done." (Teacher A.3, page 11)

These examples demonstrate that teachers are not passive recipients of professional development, but rather active agents in shaping the inclusive education landscape. Their willingness to experiment, reflect, and share aligns with adaptive expertise and shows a commitment to professional growth and learner-centred innovation even in resource-constrained environments.

5.3 THE SCHOOL AS ENABLING ENVIRONMENT

An enabling school environment refers to institutional practices, resources, and policies that create inclusive, supportive spaces for learners with diverse needs. Schools are widely recognised as critical enablers of resilience, particularly when they cultivate environments rich in social, emotional, structural, and ecological resources that support learners facing adversity (Ungar et al., 2019, p.615). Such environments not only buffer the impact of risk factors but also promote protective processes that enhance learners' capacity to adapt and thrive. The findings are presented under six sub-themes. In the following section, I present findings that illustrate how the school actively fosters learners' resilience in the face of writing difficulties.

5.3.1 Technology and assistive tools

Technology and assistive tools refer to digital devices, software, and adaptive equipment designed to support learners with disabilities in overcoming barriers to participation and achievement (Svensson et al., 2021, p.196). For learners with writing difficulties, these tools serve as protective factors by reducing cognitive load, enabling alternative forms of expression, and promoting independence, which are key components of resilience (Ungar et al., 2019, p. 615).

Across both schools, participants highlighted the use of ***general classroom technology*** such as projectors, smartboards, and iPads to deliver content visually (see photographs 5.16 – 5.18). These tools allowed teachers to employ multimodal strategies that supported

comprehension and engagement. For example, Teacher A.1 explained that the use of a projector served as a buffer for the physical demands of notetaking, as it allows learners to focus more on understanding and engage with the lesson, rather than on the mechanics of writing:

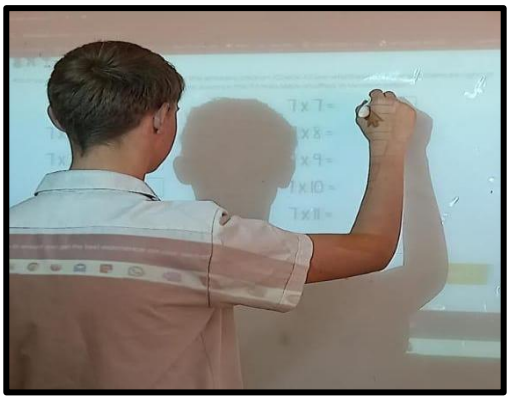
“So when it comes to the learners, like all learners in general, whether it’s slow, whether okay, the fast ones that are way ahead and the ones with the learning challenges…I do a lot of my things on the projector, so I teach from my iPad, and then I project everything… I also feel that students with disabilities, they take longer to write, and if they are forced to rush, then it also aggravates the issue of them writing with difficulty.” (Teacher A.1, page 4)



Photograph 5.16: Overhead projector as a classroom resource (School A)



Photograph 5.17: Overhead projector as a classroom resource (School B)



Photograph 5.18: Mathematics lesson being projected on smartboard for practical learning (School B)

The visual presentation of content was perceived as particularly helpful for learners who struggle with handwriting, as it enabled them to follow lessons without the added pressure of taking notes.

Beyond general classroom technology, assistive software such as STT and TTS applications emerged as critical support tools for learners with writing difficulties. These tools allowed learners to dictate responses or listen to written content, reducing barriers associated with decoding and transcription. Teachers described how these features were integrated into assessments:

"…The learners get headphones that they can put on, and then the computer will read the question for them, and they can type out the answer in an answer book. And I think there's also, instead of them typing, they can say the answers, and it transcribes from uhh, text, from speech-to-text." (Teacher A.4 pages 13–14).

Similarly, School B introduced STT technology, which teachers and the therapist viewed as transformative, and enabled learners to cope better with their formal assessments and examinations:

"We actually just had a demo yesterday… a speech-to-text technology… the learners can also use a microphone, and then it transcribes as they say it." (Teacher B.2, pages 8–9)

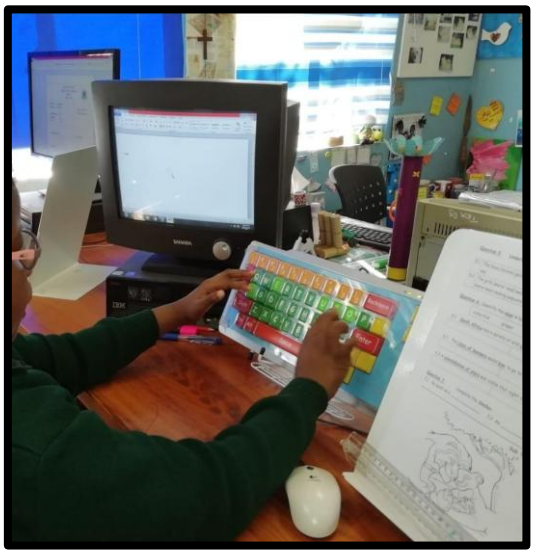
"…there is a voice-to-text programme where children, where a child can say and then the computer types it. So that makes a big difference." (Psychologist B.2, page 15)

Participants also referred to the exam portal system, which combines STT/TTS features with secure assessment platforms. This system enables learners to complete exams independently using headphones and computers, thereby reducing reliance on human scribes and fostering autonomy (see photographs 5.19 and 5.20). As one teacher noted:

"There's a computer system… where all assessments can be loaded onto the computer… and the child can sit at the computer, have earphones… and type the answers." (Teacher A.5, page 9)



Photograph 5.19: Learner utilising the new exam portal software system for assessment (School B)



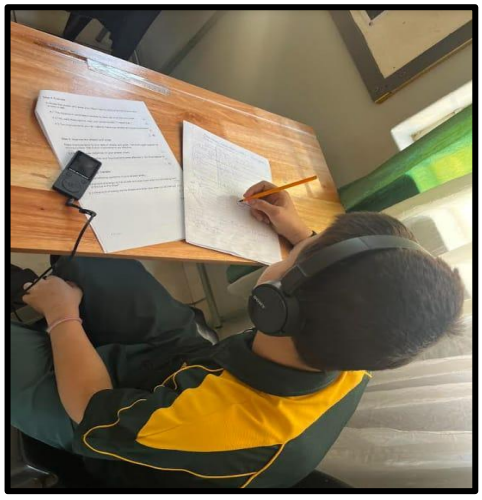
Photograph 5.20: Learner using a specialised keyboard with STT to complete an examination (School B)

Additional adaptive tools included MPEG-1 Audio Layer III (MP3) readers, C-Pens, specialised keyboards, pencil grips, and eye-tracking technology for learners with severe motor challenges. These devices were described as practical solutions that enhance accessibility and confidence:

When asked about technologies that could be introduced to support learners both at school and at home, Teacher B.4 referred to two commonly used adaptive devices, such as an MP3 player (see photograph 5.21) and a C-Pen, which can function as a reader, alongside other accommodations designed to assist with writing, bearing in mind that some learners with writing difficulties also face challenges with reading and vice versa.

“So the pen goes with the sentence, and then the pen reads for the learner.” (Teacher B.4, page 12)

“The one child only has an **MP3**… a device that reads for the child instead of a person sitting there.” (Teacher B3, page 3)



Photograph 5.21: Learner using the MP3 reader with headphones and a weighted pen to complete an assessment

5.3.2 Facilitators and allied support

Classroom facilitators and school-based professionals, such as educational psychologists, school counsellors, OTs, and speech therapists, play a very important role in creating an enabling school environment for learners with writing difficulties. These support structures function as resilience enablers by reducing barriers to participation, providing specialised interventions, and fostering emotional security (Jeremy et al., 2024, p. 607; Miller et al., 2022, p. 2).

5.3.2.1 Classroom facilitators

In School B, facilitators were embedded within the classroom to provide immediate, personalised assistance. Their responsibilities extended beyond academic support to include emotional reassurance, which helped learners feel safe and understood. Teachers A.4, B.1, and B.2 described facilitators as essential partners in inclusive education:

“Most classes have a **class assistant** who **helps the learners who are struggling** with writing.” (Teacher A.4, page 8)

For some learners, writing was so challenging that even legibility was a barrier. In these cases, facilitators stepped in as scribes or introduced technology to bridge the gap, as reported by Teacher B.1:

“We have facilitators in the class that can write for them… they can type on computers if it’s so bad that you can’t read it at all.” (Teacher B.1 page 2)

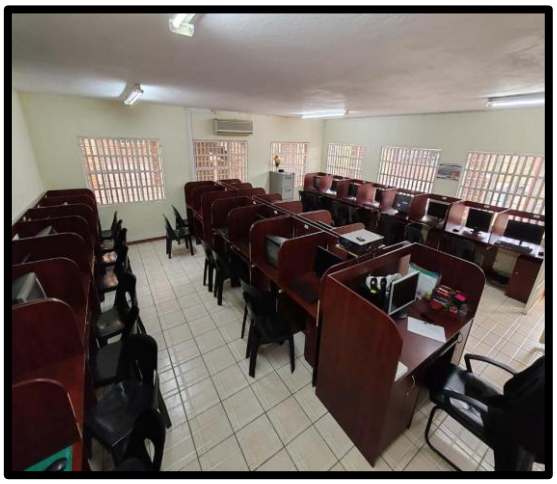
“At School B, each classroom has a computer which learners can use to type their work, or learners can also make use of a laptop for class work.” (Field notes, School B, page 20)

Teacher A.4 at School A also spoke about the use of computers and printers as accessible technological tools that support learners with writing difficulties (see photographs 5.22 and 5.23), enabling them to complete class activities and tasks with greater ease:

“If you need assistance, we can print for you. We can type for you. Um, they can use the computer room if they want to type something instead of writing something because they find it faster to type compared to writing…So even if there's notes in class that you wrote and you find it's really untidy, you are welcome to go during break and say, “Can I use the computer to type out those notes and print it and paste it over your notes?” So that helps as well with the writing difficulties specifically.” (Teacher A.4. page 12)



Photograph 5.22: Learner typing notes on a laptop in class during break (School B)



Photograph 5.23: Computer room accessible to learners (School A)

Support was also relational, as classroom assistants were trusted figures who were often more approachable than teachers (see photograph 5.24). Their presence created a safe space in which learners felt understood, since the classroom assistants typically help learners with their classwork and provide encouragement, motivating them to complete tasks and remain engaged:

“In our class, we also have assistants… I might ask the assistants to please come sit with them and write down verbatim what they say.” (Teacher B.2, page 6)

“So because we have all the assistants in our classes to also help, most of them feel comfortable with the assistants helping them because they know them better than the teachers.” (Teacher B.2, page 9)

Furthermore, when asked about classroom support measures and available accommodations at school, in a follow-up interview, Teacher B.4 emphasised the importance of classroom assistants in motivating and encouraging learners:

“The first and most important throughout the school in each class is the use of a class assistant. The assistant helps the learner with their class work as well as motivates the learner to complete tasks.” (Teacher B.4, Fieldnotes, page 19)



Photograph 5.24: Learner with assistant / scribe accommodation (School B)

At School A, Teacher A.2 shared her perspective on improving the educational experience of learners with writing difficulties in mainstream settings, stating:

“So maybe a teacher assistant, I would say, maybe will help…I've heard of a teacher assistant. So if a learner is struggling, then maybe a teacher assistant could help those that are struggling.” (Teacher A.2, page 11)

5.3.2.2 Therapists and auxiliary services

Beyond the classroom, the schools offered access to OTs, speech therapists, and educational psychologists who collaborated with teachers to design tailored interventions. These professionals provided specialised strategies such as visual perceptual training, motor coordination exercises (see photograph 5.25), and differentiated learning plans:

“We have the therapists here to help them [Joshua, Robby, and Sammy] as well… the occupational therapist is also here to help, and then the psychologist is also here to help. So I feel they [Joshua, Robby and Sammy] have a big support system even if school doesn’t come from home.” (Teacher B.3, page 8)



Photograph 5.25: Fine motor skills activities in occupational therapy

Therapist A.1 also conducted assessments to identify learners' strengths and challenges, enabling targeted support:

"If a child has low muscle tone… I strongly recommend any sports activities and horse riding and swimming." (Therapist A.1, page 7)

Collaboration between school-based professionals, teachers, and parents was viewed as critical for sustaining progress:

The school ecology expanded into a robust network of allied professionals. Educational psychologists, OTs, and speech therapists worked hand in hand with teachers to design interventions tailored to each learner's needs. Therapist A.1 and Psychologist B.2 captured the essence of this system:

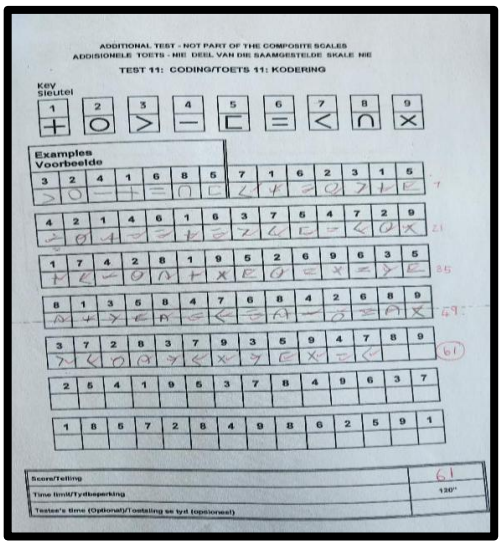
"I focus in my practice on the visual perceptual training… the foundation for reading and writing and spelling.... So on a concrete level, I first focus on that and then even with the older children and then bring it through to how do we apply that in my schoolwork…" (Therapist A.1, page 7)

Therapist A.1 also described how she applies a direct yet simple technique to support learners with writing difficulties, helping them avoid strain on their hands and fingers when they are required to write in class:

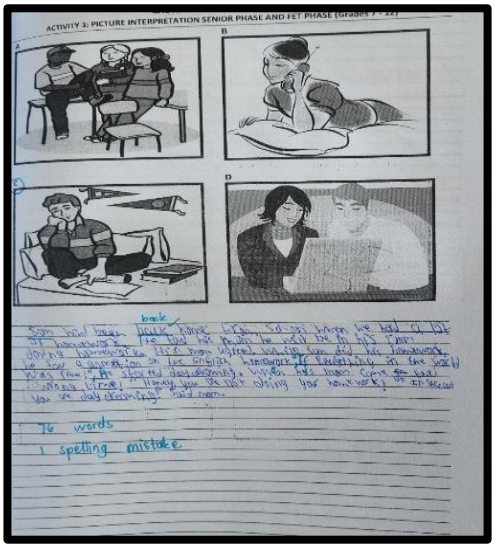
"In the classroom, I tell the kids that once, if they start to feel their fingers are paining and getting tired, it means their grip is too hard, and they must relax. Or when they feel their shoulder comes up to their ear when they write, to relax." (Therapist A.1, page 8)

Psychologist B.2 explained how assessments are conducted during visits to the educational psychology therapy room in order to determine the level and intensity of the learners' difficulties:

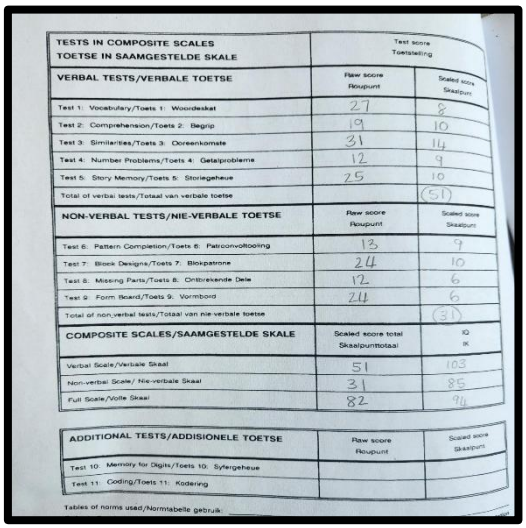
“So we do an IQ assessment to get a nice background of the child's functioning, um, what their cognitive abilities is, and you also get more information on perceptual skills, stuff like that and then we do, um, reading and writing activities to establish their scholastic ability… Um you also look at the way that they write because you, you physically sit across from them when they do it to see whether they are struggling to get whatever's written and even the occupational therapists will tell you, um, looking at stuff like their, the pressure on paper will tell you there's fine motor control or there's, um, the shoulder muscle isn't stable something like that so there's a lot of things that you can get, information out of just from having the child doing a writing activity.” (Psychologist B.2, page 3)



Photograph 5.26: Visual perceptual skills test used by the educational psychologist (School B)



Photograph 5.27: Writing, language and interpretation test by the educational psychologist for grades 7-12 (School B)



Photograph 5.28: Overall test scoring scale (School B)

Insight into how a solution-oriented approach can be used to support learners and help them be active agents in their own development was also described by Psychologist B.2:

"…when I work with a child who has difficulty with whatever, emotional, social, physical or academic, I try to get them to come up with a plan to find a solution. I don't want to just give the solution, um, but obviously I am there to guide them, and then we can discuss, they can give solutions, I can give solutions and then discuss together, okay, do you think the solution is going to work? Why, why not? What about this one? Why, why not? Okay, which ones are you willing to try? Let's try them and then come back to me and tell me which one worked…" (Psychologist B.2, page 11)

For adolescents, therapists emphasised visual-perceptual training to improve reading and writing, while educational psychologists used IQ and perceptual assessments to pinpoint areas of need and then applied solution-oriented approaches to provide support.

5.3.2.3 Holistic support and collaboration

School-based professionals emphasised the importance of integrating academic and emotional interventions in order to promote holistic development and ensure that learners build both competence and confidence. For example, occupational therapy sessions included activities such as horse riding and swimming to build stamina and confidence:

"If a child has low muscle tone… I strongly recommend any sports activities and horse riding and swimming." (Therapist A.1, page 7)

Collaboration between the therapist, educational psychologist, teachers, and parents was viewed as critical for sustaining progress:

"It's really where one works very closely with the teacher… the teacher must have the freedom to come to the therapist and say, help me." (Therapist A.1, page 9)

"All the therapists, whether it's an occupational or physio or speech therapist or psychologist, can help make plans and help the learner with new methods or new ways of doing things, um, and show them new things. So they actually give them more opportunities…" (Psychologist B.2, page 11)

To support learners' academic and emotional well-being, designated class spaces were observed at School B that allowed learners to take a 5–10-minute time-out during a lesson to regain emotional grounding and focus when they feel overwhelmed in the classroom.

"Learners can sit in a designated class space for 5–10 minutes until they feel calm and ready again to enter the main classroom, then continue with work." (Field notes, School B, page 19)

In a follow-up interview, Teacher B.2 also pointed out how collaboration between teachers, parents and allied professionals helps to better support learners' emotional and holistic well-being:

"If learners are having an emotional problem or show signs of depression, etc., as teachers we speak to the parents and educational psychologist… all decisions are taken in consultation with the parents first." (Teacher B.2, Field notes, page 19)

Teachers, school-based professionals, and parents worked together to support the learners with writing difficulties by sharing information and coordinating their efforts. This enabled them to collaborate and provide insights from their context, and, as a result, their support was better aligned and more responsive to learners' daily experiences.

5.3.3.4 Scribes as formal accommodation

Both schools implemented scribes during formal assessment to ensure equitable access. A scribe writes down the learner's verbal responses verbatim, preserving the integrity of their ideas:

"So there's a reader and a scribe. So like we have one or two, where the person will read and write what the learner says. So basically, the learner just has to give the oral." (Teacher A.2, page 8)

"Those accommodations that they can get a scribe. So when they do assessments, then a teacher from outside of the school who's gone and done the certification for it comes in. They sit with the learner, and they write the answers for the learner, so that the learner doesn't, is not disadvantaged because of their writing…" (Teacher A.4, page 12)

"I think with assessments, it's a bit easier, because the scribes are available" (Teacher A.3, page 10)

"…the person reads out the question, and then the child gives the answer, and the scribe will write the answer for the learner." (Teacher A.1, page 5)

"When it comes to assessments, there's a scribe that comes to the school… reads out the entire paper and then the learner tells the scribe the answers and the scribe writes it down." (Teacher A.5, page 3)

At School A, all the teachers highlighted the implementation of scribes as a formal accommodation to assist learners and provide a fair opportunity for them to complete tests and examinations successfully.

Like School A, teachers and the therapist at School B emphasised the use of scribes as a prime accommodation applied for through the DoE for learners with writing difficulties:

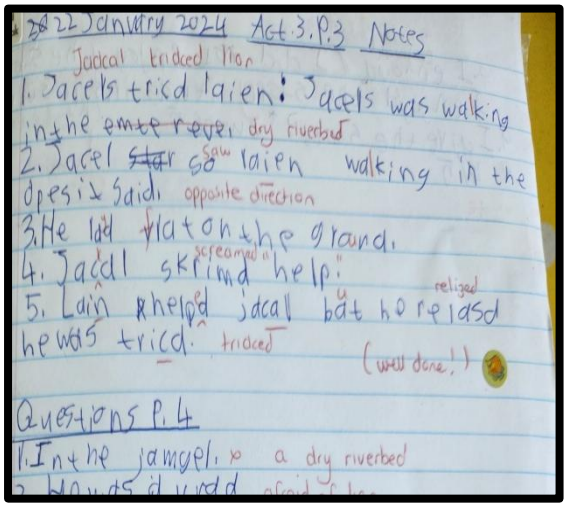
“Okay, so for assessments we, we work closely with the Department of Education, and we apply for accommodation for our learners or sometimes concessions, and our accommodations that we use are often a scribe. So in a formal assessment you have a scribe often we have a reader and a scribe it depends how the learners were tested by the educational psychologist on what level their reading is how far behind they are their written work are far behind they are and then we have to formally apply to the Department of Education for approval for these accommodations.” (Teacher B.2, page 8)

“…as I said, they get scribes or a computer to help them in tests to do their work, so they get all the help they can.” (Teacher B.1, page 2)

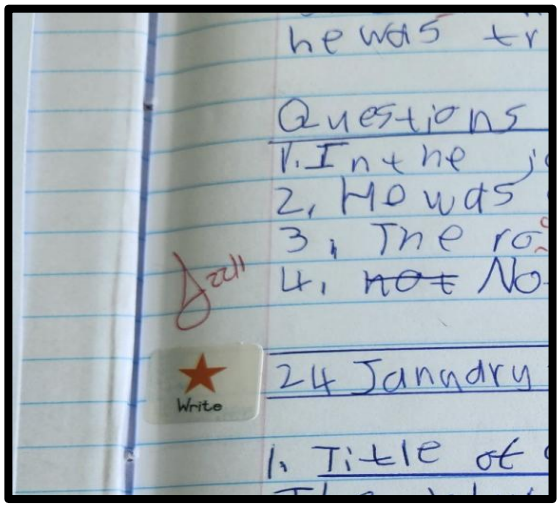
“…the reader and the scribe only are their eyes and their ears and their hands…So, for example, if they say um um um, then the scribe has to write um um um. So, I think that helps them also. They feel more comfortable because they know they have that accommodation.” (Teacher B.4, page 11)

Alongside the formal accommodations, it was observed that learners’ books and test papers had concession stickers for handwriting, spelling, and language. These stickers are placed in learners’ workbooks and exam answer booklets to disregard the untidy handwriting or spelling mistakes as long as what is written is phonetically correct (see photographs 5.29 and 5.30). Teacher also made use of “stickers of encouragement and words of praise for their effort.” (Field notes, School B, page 17).

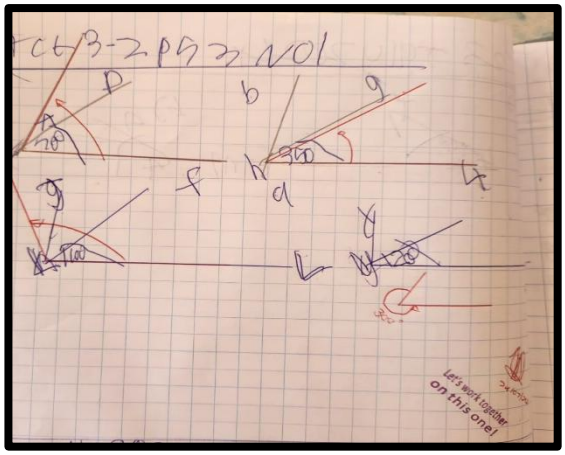
These affirmations (see photograph 5.31), served as a motivational tool to encourage learners to persist and continue progressing.



Photograph 5.29: Praise and affirmation stickers to motivate learners (School B)



Photograph 5.30: Concession sticker for writing in learners’ workbook (School B)



Photograph 5.31: Affirmation/support stamp (School A)

These layered supports, facilitators, therapists, and scripts function as protective factors within the school ecology. By reducing barriers, offering specialised interventions, and fostering a sense of emotional security, they enable learners to navigate challenges with confidence and maintain a sense of agency.

5.3.3 Peer support and acceptance

Peer support refers to positive social interactions and assistance from classmates that foster a sense of belonging and confidence. One of the strongest forms of support for learners with writing difficulties emerges from their peers (Williams et al., 2024, p. 6). As Beard et al. (2024, p. 1669) note, when these learners receive acceptance and sustained support from their peers, it has a markedly positive impact on their self-esteem. The interviews reaffirmed this, revealing that peer relationships provided essential encouragement and motivation, allowing learners with writing difficulties to feel more confident and less overwhelmed.

5.3.3.1 Emotional and social support

Participants consistently highlighted the role of peers in creating a sense of belonging. One parent explained how her child, Adam, thrived socially:

“I found that at that school, he thrived with his friends and peers.” (Parent A.2, page 2)

This emotional companionship extended beyond academics, as peers offered encouragement in other areas of life, such as physical well-being:

“Like I said, he's got very good friends. They really like, they really motivate and encourage him, not only academically, physically, like, you know, now they're giving him diet plans…” (Parent A.2, page 2)

Teacher A.2 spoke about learner interactions and their supportive nature, noting that they maintain a good understanding and often offer each other help:

“…you can see the interaction with the learners and like that, and I'm glad they get along well. I think we have got an understanding. They help one another in class.” (Teacher A.2, page 4)

Teacher A.2 further added that learners are not afraid to ask for help, as they know they can rely on these supportive peers:

“If there's something the learner doesn't understand, then they have the, the peers to help them… It's not like they afraid to ask. So, like you know, there is that interaction.” (Teacher A.2, page 5)

Furthermore, Teacher A.3 commented on support from peers, describing how they form a buddy system. Peers can serve as a guide which not only provides academic support but also protects the learner emotionally and socially as they work together:

“I think the fact that they have friends that understand what they're going through. Or a friend that understands. And that friend is willing to help share notes. Just be sort of a buddy. Sort of like a buddy system. Where the child that experiences difficulties actually has someone that they can get the help from... And it's subtle help, you know. It's where if you're sharing, discuss the answer together. Or he doesn't understand, the friend will just give us a shorter explanation. That friend sort of serves as a guide to the child. And I find that that helps. Because then they don't have to ask me all the time. It's less embarrassing also for the child. The fact that it's like it's a trusted friend, and the friend understands. And then it buffers it.” (Teacher A.3, pages 7–8)

5.3.3.2 Acceptance and anti-bullying culture

A zero-tolerance approach to bullying was evident in both schools, creating a safe, inclusive environment:

“In the classroom, nobody really picks on them for those issues. And that makes a big difference.” (Teacher A.3, page 8)

Similarly, when asked about the value of peers within the classroom and instances of bullying, in a follow-up interview, Parent A.1 expressed that she is aware that:

“The peers are very helpful in class. The learners’ peers understand the situation and try to help where they can; there is no issue of bullying.” (Parent A.1, Fieldnotes, page 23)

This proactive stance against discrimination aligns with resilience literature, which emphasises emotional safety as a prerequisite for adaptive functioning (Ungar et al., 2019, p. 7).

At School A, Therapist A.1 shared a slightly different perspective, noting that acceptance and experiences of bullying also depend on a child's personality and age. She highlighted that acceptance is most common during the early years, but may change as learners grow older.

"A child's personality is important in how others respond to them. For instance, in the foundation phase, young children can be more accepting of each other, but as they grow older it might be a problem as the learner then doesn't fit in if they're different." (Therapist A.1, School A)

5.3.3.3 Support beyond the classroom

Peer support extended into informal spaces such as break times and prayer sessions, where learners were accompanied and assisted by friends. Teacher A.5 spoke on how older peers assisted a learner as a matter of care and concern for her physical condition and learning barriers:

"Somehow they have taken it upon themselves to just be with her [Maryam] and help her around the school… they'll walk back with her." (Teacher A.5, page 5)

At School B, Teachers B.2 and B.3 noted a culture of shared understanding among learners:

"It's not something where a learner has to feel that they're being identified as different… a lot of their friends around them experience the same problems." (Teacher B.2, page 7)

"So I feel that they have somebody, so they have their best friend for life, most of the time, because all of them struggle with the same thing. So I think that's helping them cope and all the teachers basically know what to do for them." (Teacher B.3, page 7–8)

In a follow-up interview, Teacher B.4 further shared that learners' awareness and acceptance of their own difficulties, as well as those of their peers, enabled them to support one another more selflessly:

"Learners are helpful to each other. I do not have to ask another learner to help the struggling child; they help on their own, they are all aware of their disabilities and speak openly about it, for example, 'I am dyslexic.'" (Teacher B.4, page 22)

Learners were acknowledged and supported by their peers both in and out of the classroom environment. Forming a strong relationship provided learners with a sense of belonging and confidence, and enabled them to engage more positively in academic and social activities.

5.3.4 Teacher enrichment and collaboration

Teacher enrichment refers to professional development and training designed to improve inclusive practices. Teachers have a central role in determining the educational path of adolescent learners, particularly those who experience writing difficulties as part of the broader

spectrum of learning disabilities (Chaudhary et al., 2025, p. 444). For this reason, teacher awareness and enrichment in effectively creating and nurturing a supportive learning environment for these learners becomes essential.

5.3.4.1 Professional development and training

Participants across both schools emphasise the importance of ongoing training to enhance teachers' understanding of learning disabilities and inclusive strategies. Training was delivered through workshops organised by the DBE, short courses facilitated by allied professionals, and school-based sessions led by therapists. Teachers described these opportunities as essential for improving classroom practice:

"We do training in the school, we have training in the school, our Physios and Occupational Therapists give us training, our Speech Therapist gives us training in the school… On Tuesday afternoons, normally. We get a list of trainings that we can attend every term from the GDE… and the unions as well send you stuff that you can do." (Teacher B.1, page 3)

Similarly, Teacher A.2 at School A reported attending short courses focused on identifying and supporting learners with dyslexia and related difficulties:

"We did have short courses where people came to the school, in fact, a few years ago, where they spoke about now, you know, we have maybe autistic learners or learners with, uhh, barriers and how to address them. So I think that helped, like, you know, identifying learners with dyslexia and so forth while we are teaching." (Teacher A.2, page 1)

"The workshops we had. We had one or two workshops, and then we also had a video that we played on learning disabilities, you know, just to make us more aware of it." (Teacher A.2, School A, page 10)

5.3.4.2 Commitment to continuous learning

Teachers expressed a strong sense of responsibility to remain informed about best practices, even when formal training was limited. This commitment reflects teacher agency and adaptability, which are qualities that contribute to resilience-building for both learners and teachers.

"Well, we are obligated to… keep up to date with all the new things possible. So we quite regularly go to workshops, but not necessarily for all the individual disabilities our children face." (Teacher B.4, page 12)

In a follow-up interview with Teacher B.4, when asked about professional development opportunities that could enhance support for learners with writing difficulties, she specifically mentioned that she enjoyed workshops which encouraged collaboration among teachers from

different geographical areas. She explained that such workshops helped to establish a community of practice where effective teaching strategies are shared and implemented to support learners. As she noted:

“We get ideas on how different teachers teach.” (Teacher B.4, Field notes, page 20)

Teacher B.2 shared similar sentiments regarding training that could help with supporting learners’ memory and emotional development:

“I attended a training session at OR Tambo a while ago, which had to do with um how to help learners to remember things better. It was a memory development course… also, emotional development of the learners. How to identify different types of personalities in the class and how to work with each personality.” (Teacher B.2, School B, page 10)

In addition to workshops and training on teaching and learning practices, Teacher A.1also spoke about training in the use of classroom resources, such as the smartboard, which can be particularly beneficial for learners with writing difficulties.

“We went for a lot of workshops with regard to the smart board. It could be possibly related because the smart board also enhances or it helps learners with difficulties, if they’re struggling or they are challenged, those programmes do help because you have that visual and you have, like, they can see, or we can show them videos, so I went for the smart board training…” (Teacher A.1, page 6)

Teachers’ enrichment and awareness enabled them to respond proactively to learners’ needs, which in turn helped create conditions that promoted emotional safety, academic engagement, and a sense of belonging.

5.3.5 Inclusive practices and resources

Inclusive school practices include differentiated instruction, physical accessibility, and resource provision that enable equitable participation. Ainscow (2020, p. 7) argues that when schools operate as inclusive environments, they can mobilise internal resources through teaching strategies, support services, parental engagement, peer networks, and environmental design to create learning spaces that recognise and value diversity. Similarly, Lakkala et al. (2021, p. 2) emphasise that inclusive schools cultivate a supportive school climate in which safe and trusting teacher-learner relationships enhance learners’ engagement. To successfully cater to learners’ diverse needs, support for teachers is often provided through the school’s own resource systems. When a school intentionally fosters positive interactions between teachers and learners, it helps create a trust-based educational environment, one that strengthens learners’ well-being, safety, and overall participation.

5.3.5.1 Commitment to inclusivity

Teachers described both schools as actively striving to accommodate learners with writing difficulties through differentiated instruction, flexible assessment, and structural adaptations. Teachers emphasised a strong ethos of acceptance:

“At our school [we] have a very strong approach to inclusive education where we really try our best to accommodate our learners in the class in various ways.” (Teacher B.2, page 7)

“…the school also accepts that there's learners with difficulties and they need to do something on their part.” (Teacher A.3, page 9)

This commitment extended beyond classroom teaching to organisational structures, ensuring that learners were not excluded from any school activities:

“There’s no exclusion. So whether it is a sports day, whether it’s um, a project, whether it’s a market day, whatever it is, the learner will always be included...” (Teacher A.4, page 11)



Photograph 5.32: Annual School Market Day organised by teachers and learners (School A)



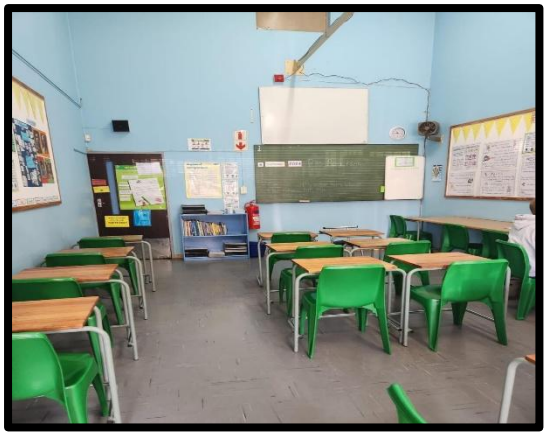
Photograph 5.33: Learners participating in a two-legged race event on sports day (School A)

5.3.5.2 Resource provision and environmental design

Inclusive practice was supported by the school’s investment in resources and physical accessibility. Teachers and the psychologist highlighted the importance of sharing information and providing adaptive materials to align home and school interventions:

“The school spends money on resources like that… sharing information is the biggest thing we can do to help the families.” (Psychologist B.2, page 18)

Observations confirmed that School B offered wheelchair-friendly classrooms (see photograph 5.34), hostel accommodation, and dining facilities for resident learners, while School A provided recreational spaces and sporting fields (see photograph 5.35). These structural features fostered emotional safety and participation:



Photograph 5.34: Wheelchair friendly classroom (School B)



Photograph 5.35: Padel courts as part of the school's recreational facilities (School A)

During data collection, it was noted that several facilities were linked to the hostel for learners residing at the school. Among these, the school kitchen, dining hall, and vegetable garden stood out for their spacious design and calming, relaxing atmosphere (see photograph 5.36). Learners cultivated their own vegetables in the garden (see photograph 5.37), which also serves as an extra-mural activity. This practice not only fosters practical learning but also enhances fine and gross motor skills, supporting hand-eye coordination and overall development.

"There is a school hall and a kitchen with a dining hall for learners who reside at the school. There are also separate classroom facilities for learners with physical disabilities and a vegetable garden. The learners grow their own vegetables in the garden. This also counts as an extramural activity which supports their fine and gross motor skills, hand-eye coordination and practical learning." (Field notes, School B, page 14)



Photograph 5.36: Kitchen diner for hostel resident learners (School B)



Photograph 5.37: Learners residing in the hostel grow their own vegetables in a well-maintained vegetable garden (School B)

5.3.5.3 Differentiated instruction and flexible pathways

Teachers reported using varied instructional methods to meet diverse learner needs, including task modification and alternative learning phases:

“Some teachers might have more creative ideas that they also apply, but we really try to accommodate our learners with the difficulties.” (Teacher B.2, pages 7–8)

School B offered multiple learning pathways, such as academic, skills, and top phases, ensuring that learners could progress according to their strengths:

“We have more than one phase in our school… if they struggle with the academic phase… they get placed in the skills phase or the top phase… there’s always another possibility for them.” (Teacher B.3, page 10)

Regarding differentiated instruction, when asked in a follow-up interview how writing difficulties are managed in the classroom, Teacher 2 highlighted the differentiated CAPS curriculum (see photograph 5.38), which is accessible to learners in the skills phase:

“There is the skills phase or diff CAPS for learners really struggling with reading and writing…So the differentiated CAPS is a watered-down version, they do functional language, math, etc.” (Teacher B.2, Field notes, p. 18)



Photograph 5.38: Nurturing a learner’s strengths in the skills phase with sewing classes as part of the skills phase (School B)

Inclusive practices were enacted through multiple coordinated strategies, which involved curriculum differentiation, physical accessibility, resource mobilisation, teacher-learner relationships, and sustained partnerships with families. These practices extended beyond classroom teaching and were embedded within the school’s ethos, organisational structures, and broader social environment.

5.3.6 Holistic development: academic support and extramural activities

Holistic development refers to the integration of academic, social, and emotional support strategies that enable learners to thrive beyond the confines of classroom instruction. For learners with writing difficulties, resilience is strengthened when schools provide structured academic interventions alongside opportunities for creative, physical, and social engagement (Alexander et al., 2021, p. 185; Pradhan & Naik, 2024, p. 3).

5.3.6.1 Academic support

Both schools implemented remedial interventions to address learning gaps and prevent academic regression. These interventions included extra classes, targeted homework support, and differentiated tasks. Parent A.2 described these efforts as essential for sustaining progress:

“The school does do remedial with them, remediation. They give them extra classes when necessary.” (Parent A.2, page 10)

Teacher B.1 also mentioned the extra classes the school provided to help learners achieve academic success.

“I teach extra classes for them to get, to pass their English.” (Teacher B.1, page 4)

The educational psychologist complemented these efforts by guiding teachers and parents on realistic expectations and strength-based strategies:

“For me to explain to teachers and to parents what the child is able to do or not do and what is realistic, I think that’s the biggest part for me to play.” (Psychologist B.2, page 17)

This collaborative approach ensured that academic support was not isolated but integrated into a broader system of care, reinforcing learners’ confidence and motivation.

5.3.6.2 Extramural activities

Extramural participation emerged as a powerful resilience enabler by promoting self-esteem, reducing stress, and fostering social belonging. Both schools offered structured opportunities for learners to engage in sports, creative arts, and cultural activities (see photographs 5.39-5.42). Teachers and parents highlighted sports as a common form of physical activity:

“Like they do play sports.” (Teacher A.1, page 2)

In a follow-up interview, when asked about extramural activities, Teacher A.3 highlighted that:

“The school does not have much in terms of sports activities, as the school infrastructure only caters for a few types of sports such as soccer, cricket, and netball for the girls.” (Teacher A.3, Field notes, page 12)

During observations at School A, it was noted that:

“Learners have a Physical Education (PE) period in which they play a sport or do some training exercises. The boys play soccer in closed netted courts while girls play netball on a concrete court.” (Field notes, School A, page 12)

Similar to School A, the school timetable indicated that learners at School B have a:

“…sports period on Tuesdays.” (Field notes, School B, page 17)

This enables all learners to engage in some form of physical activity. However, in a follow-up interview with Teacher B.4, when asked about the school’s extramural activities, she explained that:

“…*for the learners who do not play a sport, there is also an arts group where learners learn how to make different things.*” (Teacher B.4, Fieldnotes, page 21)

Through observation of the school surroundings and infrastructure, it was noted that School B:

“…offers a variety of sports for learners with physical and learning disabilities. This includes athletics, cricket, soccer, netball, hockey, rugby, soccer, regular and wheelchair basketball”. (Field notes, School B, page 21)

Offering a wide range of sports promotes inclusion, adaptability, and perseverance, allowing learners with diverse abilities to build confidence and social connections.

Extra murals extended beyond just field sports. During a follow-up interview at School B, when asked about which other factors contributed to learners’ resilience, Teacher B.4 mentioned school cultural events where learners explored and showcased their talents through different forms of dance:

“We (the school) have a drama group, dance group, arts group, and all these learners participate in the cultural event.” (Teacher B.4, Fieldnotes, page 21)



Photograph 5.39: Enclosed soccer field within the school grounds where learners often play football in physical education (PE) period or during breaktime (School A)



Photograph 5.40: Netball game during PE (School A)



Photograph 5.41: Girl's netball team (School B)



Photograph 5.42: Cultural event in which the learners take part annually (School B)

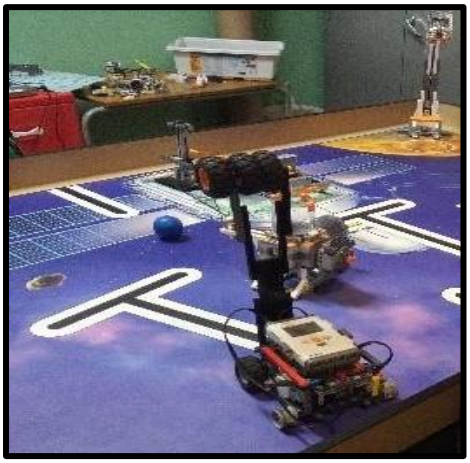
School B demonstrated a particularly inclusive approach by introducing robotics (see photograph 5.43) and game-based learning, which provided low-pressure environments for learners who struggled with competitive sports:

"Robotics is something new which the school has included, and this allows the learners to engage in experiments which are more hands-on. There is no stress of writing here." (Field notes, School B, page 18)

Non-field sports were also observed:

"…activities such as chess, table tennis, taekwondo, and carpet bowls available to adolescent learners." *(*Field notes, School B, page 2)

These sports typically benefit learners by allowing them to develop critical skills for resilience, such as strategic thinking, problem-solving, self-regulation, planning, and adaptive decision-making, while also enhancing their concentration and emotional control under pressure.



Photograph 5.43: Robotics activity (School B)

When asked about the availability of community resources or support groups to support resilience, Parent A.2 pointed towards altruism through community services and charity drives (see photographs 5.44 and 5.45). School A further contributed to resilience by fostering empathy and purpose:

"… he [Adam] goes for charity drives where they see the poverty in the area, and they try to help those people. Then they appreciate what they got, and they try to do better for themselves." (Parent A.2, page 26)



Photograph 5.44: Learners preparing for a charity initiative in an underprivileged community (School A)



Photograph 5.45: Learner assisting in a community outreach project (School A)

Holistic development was strengthened through remedial support, physical activities, and community outreach projects, which also nurtured learners' emotional well-being and social identity. These opportunities enabled learners to experience success across multiple domains, also reinforcing their sense of competence and belonging.

5.3.7 Cultural and spiritual anchors

Cultural and spiritual values provide learners with a sense of identity, belonging, and purpose, which are essential protective factors in resilience-building. Spirituality and cultural practices help learners frame challenges within a broader context of meaning, enabling them to cope more effectively and maintain hope during adversity (Mugeere et al., 2020, p. 8; Roszak et al., 2025, p. 2).

5.3.7.1 Religious practices as sources of strength

At School A, religious principles were intentionally embedded into the curriculum and daily routines (see photograph 5.46). Participants described how faith-based practices such as Quran studies, prophetic stories, and communal prayer served as spiritual anchors for learners:

"We teach the Quran … the Quran is the best way to learn resilience because it teaches us about all the prophets and their struggles… it really encourages them." (Parent A.2, page 10)



Photograph 5.46: Qurans kept on the ledge in the classroom for easy access and learning (School A)

These prophetic narratives from the Quran helped learners interpret their difficulties as temporary and meaningful, fostering perseverance and emotional regulation:

"All the prophets went through immense struggles, and we're learning about it, so our struggles are nothing compared to what they went through, so it makes us much stronger." (Parent A.2, page 10)

From observations at School A, it was noted that all learners in grades 4–12 proceed to the mosque (i.e. Muslim prayer facility) at 12:45 pm – 13:00 pm for the daily noon prayer as per the Islamic faith (see photograph 5.47). The structured rituals, recitation, and physical synchrony in the prayer reinforced this sense of collective belonging and calm:

“Attending the prayer is compulsory for all learners. Learners go for about 15 minutes to pray and then return for a short break before resuming class.” (Field notes, School A, page 11)



Photograph 5.47: Mosque on the school premises where learners attend the afternoon prayer (School A)

Parent A.1 in a follow-up interview also further elaborated on how religion helped learners remain grounded and move forward in life:

“The religious aspect at the school is strong, and this helps learners move forward in life irrespective of whether they have a disability or not.” (Parent A.1, Fieldnotes, page 25)

Such practice [daily prayers in congregational] created predictable routines that supported emotional stability and strengthened learners’ coping mechanisms.

5.3.7.2 Integration of cultural identity

In School A, religious principles were not confined to worship but also extended to teaching practices (see photographs 5.48 and 5.49). Islamic values were integrated into secular subjects, promoting holistic learning and reinforcing identity:

“The school teaches the Quran in English and also incorporates the Quran in other subjects where applicable, for example, in geography or math.” (Field notes, School A, page 25)

Parent A.2 also highlighted how reflecting on the teachings of God through the Quran is a source of strength and encouragement, which encourages learners to be resilient:

“I think in our school, this school specifically, we do Tadzakur. We teach the Quran, and it teaches us how to be. The Quran is the best way to learn resilience because it teaches us

about all the prophets and their struggles and how they got through it, and the fact that they are doing it every day in school, it really encourages them." (Parent A.2, page 10)

Reinforcing religious identity, Teacher A.3, in a follow-up interview, described briefly how firm religious belief helped learners remain grounded as well as framed their identity more positively:

"…religious practices help ground learners and help them understand that their difficulties are 'a test from God' and by practising religion they become successful in their worldly life…" (Teacher A.3, Field notes, page 13)



Photograph 5.48: Incorporating Quran learning in other subjects (School A)



Photograph 5.49: Prayer charts on the wall in the school foyer as a reminder of God in both English and Arabic text (School A)

While School B did not embed religious practices into its curriculum, cultural identity was acknowledged through visual displays (see photograph 5.50) and inclusive activities, ensuring that learners felt respected and valued.



Photograph 5.50: Religious slogan in the school corridor as a reminder of God's love (School B), allowing learners to feel respected and valued

Having a religious grounding helped learners feel respected and valued, while also providing them with a sense of identity that served as a source of strength.

5.4 DIAGRAMMATIC REPRESENTATION OF THEMES AND SUMMARY OF FINDINGS

A review of the findings indicates that resilience in adolescents with writing difficulties is facilitated through interconnected social-ecological factors (see Figure 5.2). These include teachers as resilience enablers and the school as an enabling environment. Together, these components highlight the multiple systems within which adolescent learners with writing difficulties are situated and through which their resilience is supported. The factors associated with the successful facilitation of resilience discussed in Chapter 3, Section 3.6, reflect key components of Bronfenbrenner's ecological systems theory.

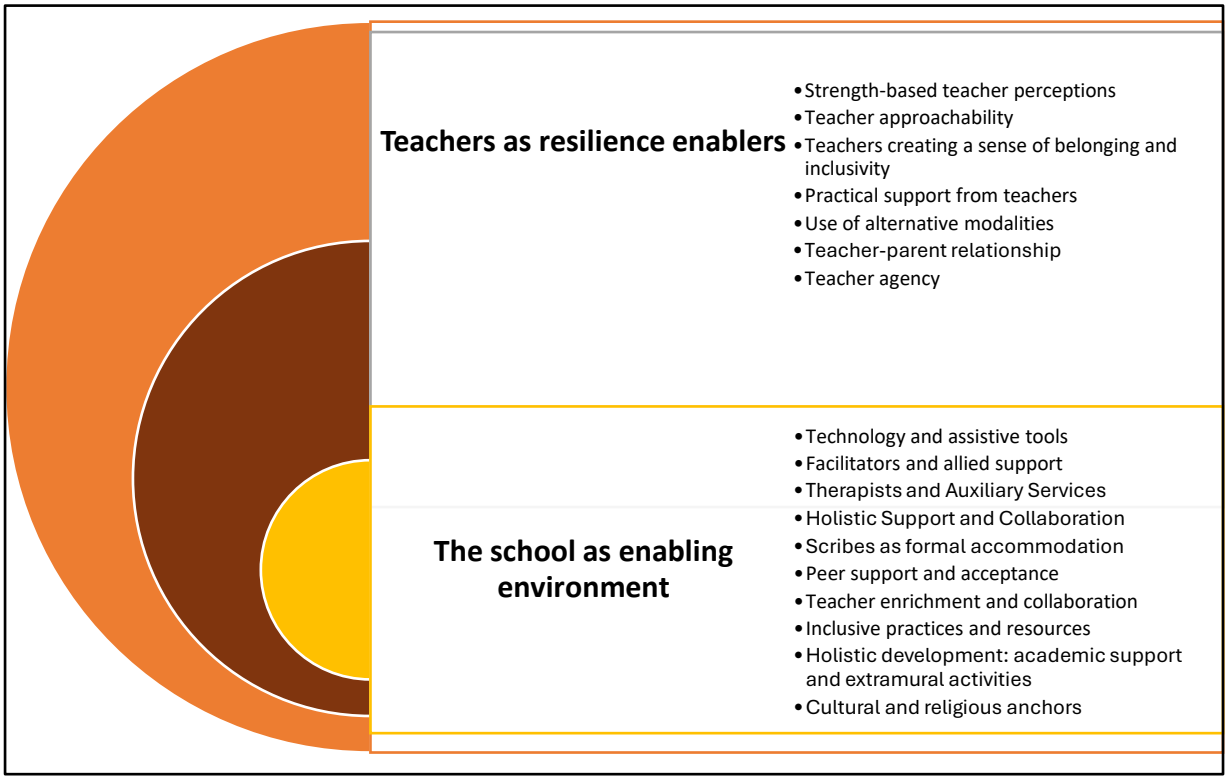


Figure 5.2: Summative overview: Themes and subthemes
Source: Author (2026)

The empirical data revealed familial, institutional, epistemological, and pedagogical influences operating across different ecological levels in both mainstream and special needs education schools. While common patterns emerged, each case also revealed context-specific requirements that contribute to resilience and the developmental needs of learners with writing difficulties.

Differences and similarities were evident in the physical accessibility of schools, the availability and use of resources, and the extent of accommodations provided for learners with writing

difficulties. Most notably, the findings highlight the importance of sustained collaboration among teachers, parents, and professionals within the school in facilitating resilience. This collaboration emerged as a central enabling factor across both school contexts and was particularly evident in daily teaching and support practices.

The findings are most strongly located at the micro and meso levels, where teachers, parents, and professionals directly support learners. While at the exo level, teachers' knowledge enrichment through partnerships with allied professionals enables better support for learners. At the meso level, partnerships between parents, teachers, and professionals to strengthen support for learners play a critical role. At the macro level, policy structures and cultural influences shape resilience more indirectly by influencing school environments and practices. At the centre of this ecological system is the adolescent learner with writing difficulties, who is directly or indirectly influenced by all identified themes.

5.5 DISCUSSION OF FINDINGS

The data generated was centred around the main research question: "How do school ecologies facilitate resilience in adolescents with writing difficulties?" The findings affirm that resilience is not an individual trait located within the learner, but rather a dynamic, relational, and systemic process shaped by interactions across ecological systems (Masten, 2021, p. 2). Drawing on Bronfenbrenner's ecological systems theory (1979) (see Section 3.5), resilience in this study emerged through interconnected processes and protective factors within the microsystem. The school ecology corresponds to the microsystem in which learners receive direct support concerning barriers they may encounter. The internal support structures include teachers, support staff, therapists, allied professionals, SBST, parents, and the infrastructure and resources available to the learners. The interactions between these internal structures form mesosystemic relationships between these contexts, for instance, the relationships between the teacher and parents, or the school and home.

On the other hand, broader external intercollaborative structures, such as the DBST and structural influences of policy, form part of the exosystemic and macro-systemic relationships that impact the functioning of the school. Multiple bidirectional transactions impact the learners' microsystem and, therefore, the establishment of support that enables resilience. Based on the ecological systems definition of resilience, two comprehensive overarching themes unfolded: the school as a resilience enabler and the school as an enabling

environment. Within these themes, the key protective resources identified (as aligned with Bronfenbrenner's ecological systems theory and SERT) are summarised in Figure 5.3 below.

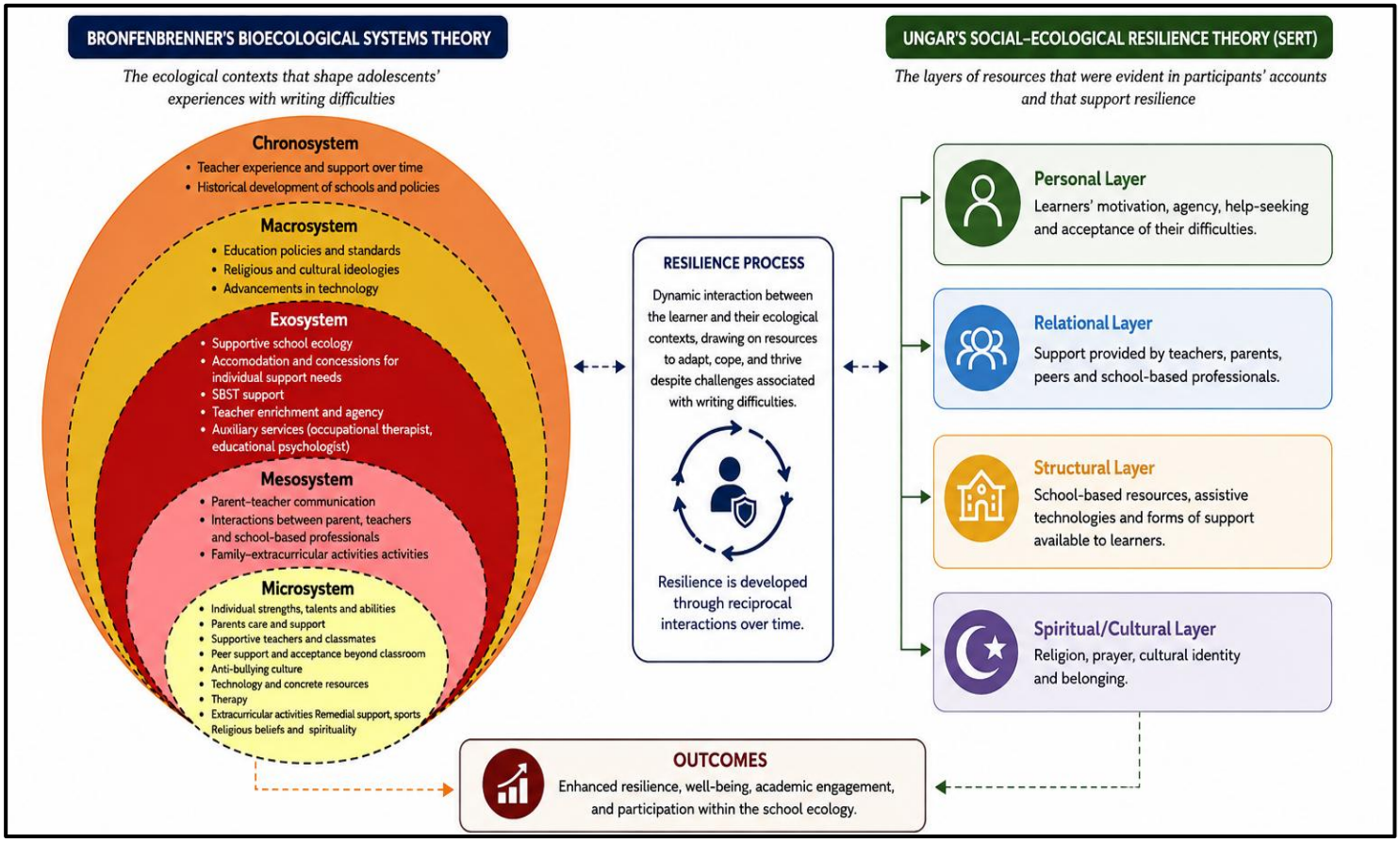


Figure 5.3: Summary of key findings

Source: Adapted from Fourie (2011, p. 180)

A review of the literature indicates that the above multisystemic factors (see Figure 5.3) are well known in supporting learner resilience. Studies with resilient children and young people in other contexts of risk have demonstrated that the following central theme on teachers as resilience enablers and corresponding subthemes facilitate resilience in adolescents with disability who are at risk:

Regarding **strength-based teacher perceptions,** a study by Sheymardanov et al. (2020, p. 2319) has shown that for learners to demonstrate resilience, they must demonstrate characteristics that show a willingness to move forward. In line with this assertion, the findings indicated that learners' **individual strengths**, **talents, and abilities** were viewed as a promising protective resource that encouraged resilience (Rupondo et al., 2025, p. 2). When teachers acknowledge learners through their strengths, it indicates a shift away from viewing learners as intrinsically impaired, to a more social ecological view that considers the removal of barriers through multiple factors, including the learners' individual traits in shaping their

behaviour and adaptive outcomes (Kapoor & Kaul, 2024, p. 201). Following on learners' individual strengths, De Lorenzo et al. (2023, p. 2) (specifically on adolescents and young children), Forgeard (2025, p. 222) (specifically adult resilience in the face of adversity), and Resnick (2018, p. 206) (specifically adult and ageing resilience), also reported that learner motivation and creativity in individuals encourage resilience. In addition, alongside **creativity**, this study, like Collado-Soler (2023, p. 1365) (specifically adolescent resilience), found **emotional intelligence** to be a key aspect of learners' resilience. Furthermore, similar to Çifti (2023, p. 332) and Sagone et al. (2020, p. 888), **good communication skills** and **strong verbal ability** were also found to promote resilience. This means that teachers were able to perceive learners' strongest intrapersonal traits, such as resilience, and leverage these through a strength-based approach (Reid & Hamby, 2025, p. 6).

Building on strength-based teacher perceptions, **teacher approachability** (i.e., the ability to approach teachers for help) was found to encourage resilience (Buanasari et al., 2023, p. 34). However, unlike studies by Goodwin et al. (2020, p. 437) and Ge (2025, p. 2), (specifically adolescents affected by mental health challenges and the COVID-19 pandemic) that reported on individuals' ability to seek help from family and peers, my study specifically highlighted learners' ability to approach their teachers for assistance as a culturally and contextually meaningful way of negotiating resources (Ungar, 2011, p. 6, Ungar, 2021, p. 120). **Teachers' availability and emotional responsiveness** to learners' needs were also found to be critical enablers of meaningful support, aligning with findings by Reid and Hamby (2025, p. 6) (specifically in children and youth with learning disabilities) who also identified teacher availability and accessibility as a key component in supporting learners' well-being. Linking teacher availability and accessibility to **creating safe spaces** in which learners could thrive physically, mentally, and socially was also found to promote learner well-being and adaptive functioning. Supporting this finding, a study by Anderson et al. (2022, p. 183) (specifically, youth affected by poverty and trauma) similarly reported the importance of safe spaces in promoting learner well-being and resilience.

Extending these findings, **teachers creating a sense of belonging and inclusivity** were found to promote resilience. In previous studies focusing on learners' ownership in learning, (Du Toit-Brits, 2022, p. 72) (specifically resilience in promoting mental health and well-being in children and young people), Brown et al. (2025, p 14) (specifically mental health and well-being of children and young people), and (Mawila, 2023, p. 6) (specifically learners with learning disabilities in LSEN schools), creating a sense of belonging was reported to foster resilience. Similarly, this study found that **positive classroom environments** and **inclusivity** increased adolescent learners' motivation and boosted confidence, allowing them to navigate through their challenges and thus promoting learner agency (Du Toit-Brits, 2022, p. 59).

Furthermore, **teacher expertise** in applying inclusive practices was found to contribute to resilience. However, this finding differs from Motitswe's (2025, p. 2) depiction of teachers' perceptions of inclusivity, which assumes that teachers hold negative attitudes towards inclusive practices. Rather, in this study, inclusivity was found to be of sound practice and accepted in both mainstream and special needs education contexts.

Moving beyond relational aspects, **teachers provided practical support** through task modifications and differentiated scaffolding, thereby promoting resilience among learners with SLDs. As such, learners received **individual support,** which was found to serve as another protective factor supporting learner resilience. These findings correlate with Firth (2021, p. 32) and Masinading and Gaylo (2022, p. 132), who also report that task modification differentiated scaffolding helps promote resilience in learners with SLDs. Unlike previous studies, which focus more on general inclusive practices, this study emphasises the role of **material preparation and accessibility** in strengthening engagement and motivation, as pre-organising teaching and learning materials were found to be resilience-enabling practices.

Furthermore, teachers demonstrated the **use of alternative modalities,** which promoted resilience. As indicated in the findings, verbal and practical modalities in particular were most noted. This finding is supported by the work of Estipona et al. (2025, p. 27), who also reported on verbal and practical approaches to teaching and learning as means to promote resilience.

Collaboration with parents also emerged as a protective factor. Strong **parent-teacher partnerships** foster resilience through parents as advocates for targeted support and teachers as enablers of support and resilience. Whilst this finding corroborates studies by Sheymardanov et al. (2020, p. 2320) (specifically children with writing disorders) and Myende and Nhlumayo (2022, p. 490), a study by McKenzie et al. (2020, p. 27) (specifically learners with severe to profound disabilities), reported on the importance of community partnerships alongside families and teachers in supporting learner success and positive outcomes. In contrast, this study found community support absent, highlighting the centrality of teacher-parent collaboration.

Finally, **teacher agency** was identified as a key finding. In contrast to assumptions that teachers require guided practice to implement support measures (Sang, 2020, p. 3), this study found them (i.e., teachers) to be active agents of support through self-directed learning and adaptive expertise, in turn enabling resilience.

Overall, the above findings indicate that most resilience-enabling resources reported in this study align with previous studies on children and young learners at risk, even when those risks arise from circumstances other than SLDs or writing difficulties in adolescent learners. The possible differences observed may relate to inclusivity and adaptive expertise, material

preparation and accessibility, as well as teacher agency. It is possible that teachers' positive views and their capacity to establish inclusivity and adaptive expertise are influenced by contextual and cultural variances within the environment. In this sense, their positive perceptions and established practices offer exemplary support for enabling resilience.

Extending beyond teacher practices, the wider school environment cultivated social, emotional, structural, and ecological resources that buffered risk and promoted resilience:

Technology and assistive tools were identified as protective factors that encouraged resilience. Consistent with studies by Al-Dababneh and Zhboon (2020, p. 24), (specifically children with SLDs) and Svensson et al. (2021, p. 197), (specifically children with reading and writing disabilities), the use of technology and assistive tools, when applied with **multimodal teaching and learning strategies** was found to act as a buffer against the physical demands of handwriting, allowing learners to work more easily on tasks. More specifically, **STT/TTS** were found to be the new primary technology-assisted resource that encouraged resilience. This finding aligns with Matre and Cameron (2022, p. 2) (specifically adolescents with LD) who also reported that STT/TTS plays a valuable role in supporting the learning experiences of adolescents with SLDs. In addition, other **adaptive devices** such as MP3 players, C-Pens, specialised keyboards, pencil grips, and eye-tracking technology emerged as protective factors that helped buffer motor and reading challenges. Similar patterns were observed in Ramos et al.'s (2022, p. 2) study on the C-Pen in basic education, which suggested a continued reliance on adaptive devices to sustain reading and writing activities and promote autonomy in learners' work.

Apart from technology-assisted support, **classroom assistants and facilitators** were also found to encourage resilience. Consistent with findings reported by Saloviita (2020, p. 272) (specifically regarding the inclusion of learners with support needs), this study found that classroom assistants and facilitators served as protective resources and were common in the special needs education school but less evident in the mainstream school. Although some studies (Rogan, 2023, p. 528) have reported on classroom assistants and facilitators in mainstream classrooms, this aspect was absent in the private mainstream school observed in this study. Furthermore, **allied support** through **auxiliary services,** including an OT and an educational psychologist, emerged as another protective resource that provided targeted assistance by working closely with teachers. This finding corroborates the work of Ndou and Omidire (2022, p. 5) (specifically learners with developmental language disorders), which highlighted the role of allied professionals such as speech-language therapists, learning support therapists, and educational psychologists in collaborating with teachers to support learners experiencing barriers to learning.

Holistic support and collaboration between teachers and auxiliary services were also identified as protective resources that integrated academic and emotional support measures beyond the classroom, ensuring that learners received comprehensive assistance. One possible explanation is that learners require more than academic support within the classroom; they also need emotional and psycho-social support to be supported holistically. Similar to a study by Boonma (2025, p. 2025, p. 54) (specifically youth with specific learning disorders) on the importance of collaboration between allied professionals and parents to address learners' individual needs, Kumar (2024, p. 29) (specifically learners with dysgraphia), and Seoane-Martín and Rodríguez-Martínez (2023, p. 5), (specifically young children with additional support needs), this study emphasises the accessibility of resources beyond the classroom in creating a stronger foundation for resilience. Specifically, it was found that allowing learners brief **time-outs** from the classroom provided emotional support that also benefited learners academically.

Within support practices, **formal accommodations** such as **scribes** and **extra time** were likewise found to encourage resilience. Supported by Langeveldt and Pietersen (2024, p. 109) (specifically learners with dyslexia) and Ontong and Rossouw (2024, p. 3) (specifically learners with learning disabilities), accommodations involving a scribe and extra time are frequently implemented together to provide fair opportunities for learners, particularly in examinations. Concessions such as writing, spelling, and language stickers were also found to help support resilience (Skae et al., 2020, p. 4).

Resilience was further supported by **peer support and acceptance.** In this study, peer support through acceptance and emotional companionship was found to promote resilience by creating a sense of belonging, guidance, and motivation to move forward. However, this differs from Mazher (2020, p. 309), who reported that learners with LD were less likely to seek support from peers, possibly because they were reluctant to reveal their academic weaknesses or make their challenges known. In addition to peer acceptance, this study also identified an **anti-bullying culture** as a protective factor that encouraged resilience. Unlike previous studies (Khasawneh, 2020, p. 269) (specifically learners with learning disabilities) and Nasaireh and Obeidat (2022, p. 204), which reported that bullying occurs more frequently in mainstream school settings, this study found that peers in both mainstream and special needs education settings were supportive, helpful, caring, and avoided discrimination. This encouraged emotional safety, which is important for adaptive functioning. Similar patterns were observed in a study by Almakanin et al. (2021, p. 232) (specifically refugee children with learning disabilities), who found that emotional security through shared understanding and awareness reduced stigma and promoted resilience.

Teacher awareness and enrichment in effectively creating and nurturing a supportive learning environment were found to support resilience. This finding aligns with Tebele and Chaka (2024, p. 23), who highlighted the importance of teacher training and enrichment programmes to support learners with learning barriers. In this study, teachers' commitment to continuous learning reflected **teacher agency**, which strengthened resilience by equipping them with the knowledge and skills to implement differentiated strategies, foster inclusive classroom environments, and respond proactively to learners' needs. Similar patterns were observed by Li and Ruppar (2020, p. 43) on teacher agency for inclusive education.

Commitment to inclusive practices through differentiated instruction, flexible assessment, and structural adaptations functioned as protective resources, also previously reported by Pasira (2022, p. 33). In this study, this means that participants viewed adaptation not only as essential in academic activities but also as a necessary component of the wider school structure, including participation in a variety of school events. Consistent with previous studies conducted by Farrell (2021, p. 43) (specifically learners with impairment in written expression) and Reid and Hamby (2025, p. 2) (specifically learners with learning disabilities), **resource provision and environmental design** were also found to be protective resources. The school's investment in adaptive materials and equipment, together with its efforts to ensure accessible infrastructure, supported learners' resilience. A resilience-enabling practice further found in this study and also supported by Newman and Latifi (2020, p. 14) (for learners with disabilities in general) was the cultivation of learners' own vegetable garden, which enhanced learners' self-efficacy, increased achievement, and promoted positive well-being.

Holistic development was also promoted through **academic support and extramural activities**. Similar to previous studies by Reid and Hamby (2025, p. 6) and López-Aymes (2020, p. 5) (specifically at-risk teenagers with high intellectual abilities), extramural participation (i.e., through field sports) emerged as a powerful resilience enabler that promoted learners' self-esteem, reduced stress, and fostered social belonging. This finding is further supported by Pillay (2023, p. 4), who reported that sport is a key protective factor in encouraging resilience. However, unlike other studies, this study found that **creative arts and cultural activities**, including dance, promoted resilience in culturally meaningful ways (Ungar, 2021, p. 10). In addition, **non-field sports** and **robotics** were also found and linked to resilience, as supported by Kalenjuk et al. (2022, p. 55) (specifically children with dysgraphia and writing disabilities) and Gargot et al. (2021, p. 9) (specifically children with severe dysgraphia, autism spectrum disorder (ASD) and interpersonal difficulties). Lastly, school-based academic support, through **remedial interventions** such as after-school classes, was found to promote resilience by addressing learning gaps and preventing academic regression.

In line with Uranus et al. (2022, p. 211), who also reported that community resources and acts of **altruism** encourage resilience, this study found that participation in charity drives and community upliftment projects fostered learners' confidence, agency, and adaptive coping.

Cultural and religious anchors provided learners with a sense of identity, belonging, and purpose, serving as essential protective factors (Mawila, 2023, p. 5; Reid & Hamby, 2025, p. 6). In this study, religion was embedded in the curriculum through teaching and learning practices. More notably, within the Islamic faith, the Quran provided learners with spiritual grounding, meaning-making, and acceptance of their difficulties as resilient beings with divine purpose. Aligning with this finding, Howard et al. (2023, p. 178) (specifically spirituality, resilience, and well-being between care leavers and children), reported that spirituality serves as a protective factor that brings happiness, well-being, life satisfaction, and is also a source of positivity, optimism, security, and meaning. Furthermore, the integration of **cultural identity** was identified as another protective resource that encouraged resilience. Communal prayers helped learners cope more effectively with their difficulties and strengthened their emotional and social well-being. A similar finding by Khadijah and Fauziah (2025, p. 112), specifically adolescents with mental health challenges, reported that prayer helped learners engage in mindfulness and provided a sense of belonging and emotional security. When schools recognise and integrate these values, they create environments that nurture hope, self-worth, and adaptive coping, which are critical components for learners navigating academic and personal challenges.

The above antecedents or protective factors identified can also be understood through Ungar's Social-Ecological Resilience Theory (SERT), which provides a complementary perspective on the resources that enabled resilience among adolescent learners with writing difficulties. Given the four layers highlighted by Ungar (2011) (see Figure 5.3), the personal layer was evident in learners' acceptance of their difficulties, willingness to seek help, positive attitudes, motivation, and ability to engage with available resources. The relational layer emerged through the support of teachers, parents, peers, and school-based professionals, where relationships enabled learners to access resources and receive assistance. The structural layer was visible in school-based resources and practices, including the use of assistive technology, classroom support structures, remedial interventions, and accessible learning environments. The spiritual or cultural layer was demonstrated in the role of religion, prayer, cultural identity, and spiritual grounding, which provided learners with meaning, belonging, and a sense of purpose. Viewed together, these four layers showed that resilience was facilitated through the interaction of resources within the learner and across the relationships, structures, and cultural and spiritual contexts surrounding them. Applying SERT to ecological systems theory further emphasised the influence of both the social and

environmental context on individual processes and outcomes and highlighted the social-ecological factors that enabled resilience in adolescents with writing difficulties, allowing them to thrive and achieve more than adaptive outcomes (see figure 5.3).In summary, the findings have mostly been noted in previous studies. However, when the literature on SLDs is reviewed, this study makes a contribution to theory because although the themes that emerged have been connected to resilience in general, these themes can now be linked directly to learners with writing difficulties. Since no previous studies have specifically documented writing difficulties and the role of the school ecology in supporting adolescent learners with writing difficulties, this research contributes a foundational understanding. It offers new theoretical and practical insights by identifying traditional and new resources associated with resilience. It fills a gap in the literature and encourages the school ecology (teachers, parents, and school-based professionals) to work collaboratively with learners who experience writing difficulties to facilitate and encourage their resilience. In addition, community members can be informed to support learners and their families in championing resilience through the provision of community resources and initiatives that form an integrated network with teachers, parents, and school-based professionals to facilitate resilience.

A further contribution lies in the fact that the findings support more recent understandings of resilience as a multisystemic, ecologically embedded phenomenon, encouraged by young individuals navigating towards resilience-promoting resources and in which the ecologies of these individuals respond to and support these efforts (Ungar 2021, p. 6). The findings illustrate that, among adolescent learners with writing difficulties, resilience is nurtured by teacher-level practices in which teachers are viewed as enablers of resilience, and the school environment as an enabling environment (including teachers, peers, parents, and school-based professionals). Taken together, these support systems comprise individual, familial, and community and cultural resources that contributed to resilience. For example, learners' acceptance of their difficulties enabled them to ask teachers for help. At the same time, the parent and teacher were willing to respond to the learner's needs. Resilience was encouraged by learners' own resources, which enabled them to speak up, and by familial (i.e., parental) and school-community resources (i.e., teachers). Another similar example is learners' sunny temperament, which draws teachers and friends closer to them. By showing a willingness to engage and participate, they were welcomed by peers who showed care, concern, and support beyond the classroom. Likewise, teachers' positive attitude towards learners created various opportunities to support learner well-being through teacher enrichment and agency. From these examples, it is evident that resilience is encouraged by individual, familial, and community resources, signalling a collaborative effort.

Because the findings support the idea that resilience is not linked to either interpersonal or intrapersonal resources but requires both the individual and their ecology to work together towards encouraging resilience (Ungar, 2021, p. 7), Figure 5.3 is meant to illustrate that resilience is nurtured by multisystemic, ecologically embedded bidirectional transactions that impact the learner's micro-system primarily, ensuring the support they receive enables resilience.

However, while the findings were most strongly located within the micro- and mesosystems, the exosystem and macrosystem were also relevant in shaping the conditions within which support was observed and resilience facilitated. The chronosystem, though not directly evident through participants insights, its applicability is evident through teachers' varying years of professional experience in supporting learners with writing difficulties (see table 5.) and the historical structural development of school B which over time transformed into a full LSEN school that now accommodates many learners experiencing both physical and academic barriers to learning. This reinforces the value of viewing resilience as a process embedded within interconnected systems that operate across both social contexts and time.Finally, the findings contribute to theory by refining how one of the previously noted protective resources works for adolescents with writing difficulties. In this regard, the researcher refers to religion and spiritual practices. Although previously reported as a resilience-promoting resource, the main source of support for learners was found to be religious and spiritual grounding. Learners who believed in God and exercised mindfulness, in addition to support from parents, teachers, school-based professionals, and peers, were more likely to display resilient outcomes. The researcher could not find previous studies that focus specifically on how spiritual and religious anchoring can support learners with writing difficulties and associated learning disabilities in schools by embedding it within the curriculum. Instead, existing studies (Mugeere et al., 2020, p. 3; Venkatesan, 2025, p. 2297) refer more broadly to multifaith practices in relation to disabilities in general. This refinement can therefore be seen as a contribution to the theory of what encourages resilience in adolescent learners with writing difficulties.

5.6 CONCLUSION

Teachers emerged as central figures in the teaching and learning process, given that learners spend most of their day at school and are therefore most likely to benefit from and strengthen their resilience through the support they receive within the school ecology. Teachers' interactions with learners through teaching and learning, the relationships built through rapport, as well as teachers' attitudes, personal development practices, and interactions with learners' parents, all served as protective factors in enabling their resilience.

The value of the above findings lies in demonstrating that learners with writing difficulties can be effectively supported within enabling school ecologies. Learners with writing difficulties should be viewed as capable individuals who are able to progress in much the same way as their peers, rather than being positioned solely through a deficit lens. In this study, the focus was placed on the positive factors that encourage and foster resilience in the lives of learners identified as resilient. Despite the everyday challenges associated with multiple SLDs, the protective resources identified within the school ecology can be nurtured and facilitated to support learners with writing difficulties and related learning disabilities to function resiliently. By strengthening and extending these protective resources across school ecologies, resilience can be enabled for other learners with writing difficulties, allowing them to develop into more resilient individuals who experience success and positive outcomes.

The next chapter summarises the literature, theoretical frameworks, and empirical studies, outlines the conclusions drawn, discusses the limitations of the study, and offers recommendations for practice and further research.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

The content of Chapter 6, along with the relative positioning of its topics, is depicted graphically in Figure 6.1 below.

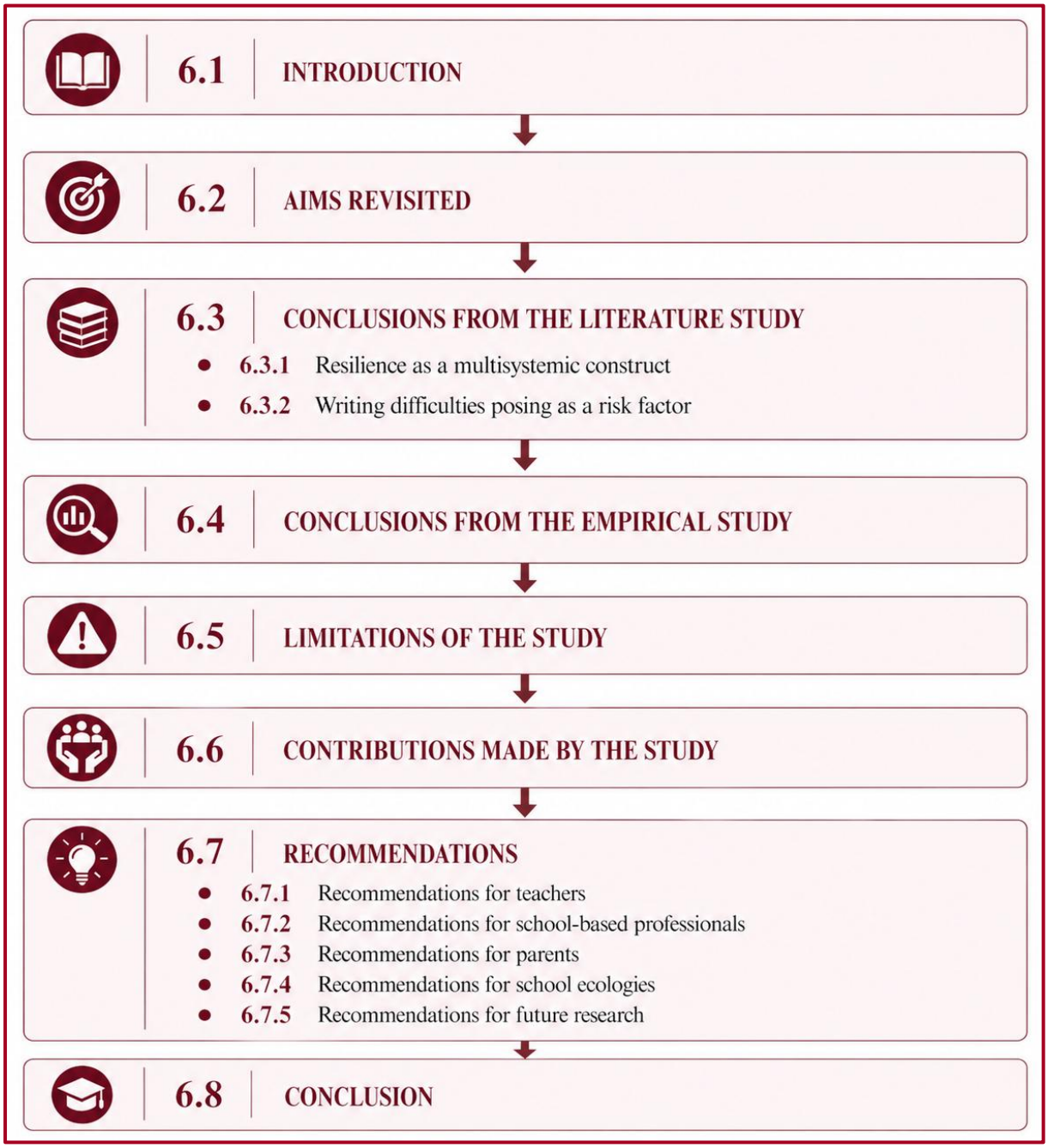


Figure 6.1: Overview of Chapter 6

6.1 INTRODUCTION

This study followed an exploration of resilience guided by the primary research question, “How do school ecologies facilitate resilience in adolescents with writing difficulties?” Throughout the study, the researcher realised that the role of school ecologies in facilitating resilience among adolescent learners experiencing writing difficulties is more complex than one would typically assume. It requires effort from various individuals to work as a team, not only within the boundaries of the school but beyond them. Collaborative effort was understood to be a prerequisite for members of the school ecology, including teachers, parents, and school-based professionals, who are determined to effectively meet the diverse needs of learners with writing difficulties. By adopting a strength-based approach, these individuals can contribute to resilient outcomes. When learners are viewed as resilient, several protective factors present within their individual ecologies can be identified through multisystemic levels, which together enable resilience. To this end, a literature and empirical study was conducted to explore how the school ecology facilitates resilience in adolescents with writing difficulties. In answering the main research question, Chapter 5 presented a qualitative inquiry, with data generated through three methods: semi-structured interviews, observation field notes, and visual data.

This chapter summarises the literature and empirical studies undertaken. The limitations of the study are acknowledged, and recommendations are made for members of the school ecology and for further research.

6.2 AIMS REVISITED

The aim of this study was to explore how school ecologies facilitate resilience in adolescents with writing difficulties. To assess whether the overall aim was achieved, the four sub-aims of the study were revisited. Table 6.1 provides a summary of these aims and indicates whether each was achieved.

Table 6.1: Aims governing the study

Aims	Achievement
Investigate the lived experiences of adolescents with writing difficulties within their school environment.	Firstly, to gain a broader understanding of adolescents with writing difficulties within their school environment, the researcher engaged directly with teachers, parents, and school-based professionals as participants who interacted closely with the adolescent learners. This was achieved through semi-structured interviews, observation field notes, and visual data that captured how the participants perceive and respond to the unique needs of adolescents with writing difficulties, thereby shedding light on their lived realities. Secondly, to complement these insights, a thorough literature study was conducted on resilience and writing difficulties, which situated the participant perspectives within the broader theoretical and ecological frameworks (i.e., how resilience processes are understood and how adolescent learners with writing difficulties can be supported holistically based on the impact their difficulties have on their lives). Lastly, by analysing the data and interpreting it across multiple levels of the school ecology, protective factors and collaborative practices that facilitate and shape learners' resilience were identified. The above-mentioned was documented in Chapters 2-5.
Explore how teachers, parents, and school-based professionals support adolescents with writing difficulties.	Qualitative data was generated through semi-structured interviews with teachers, parents and school-based professionals. Follow-up interviews were also conducted with all participants to confirm previous responses and generate deeper insights into support practices. These were recorded as observation field notes. As part of the observations, visual data was captured. The participant accounts provided insight into the strategies and collaborative practices used to meet learners' needs within the school ecology. The interview data collected from the participants were coded using inductive thematic analysis to identify the support which enabled resilience. The coding was shaped through engagement with the data, and the literature and frameworks (SERT and Bronfenbrenner's ecological systems theory) subsequently used to interpret the themes that emerged from the coding process Observation field notes were also coded, and the visual data generated were used in triangulation with the interviews. Further, by analysing these perspectives alongside the literature study, both protective factors and systemic approaches were highlighted that enabled teachers, parents, and school-based professionals to contribute to resilience. In this way, a comprehensive understanding of the support structures available to adolescents with writing difficulties was achieved.

Aims	Achievement
	The emerging findings were documented in Chapter 5 and summarise support practices which appeared to facilitate and promote resilience in adolescents with writing difficulties.
Identify school-based resources and practices that promote resilience in adolescents with writing difficulties.	Through interviews, observation field notes, and visual data, the support strategies and collaborative practices within the school ecology that enabled resilience could be captured. When these insights were considered alongside the literature study, it became possible to highlight specific resources and practices that strengthened learners' resilience. Participant interviews were coded using inductive thematic analysis to identify how school ecologies contribute to building resilience in adolescents with writing difficulties. The coding was influenced by the literature study and the relevant theories (SERT and Bronfenbrenner's ecological systems theory). Observation field notes were also coded, and the visual data generated were used in triangulation with the interviews. The emerging findings were documented in Chapter 5 and summarise resources and practices within the school ecologies that appeared to facilitate and promote resilience in adolescents with writing difficulties.
Develop recommendations for enhancing the role of school ecologies in supporting resilience among adolescents with writing difficulties.	Based on the findings of this study, recommendations are provided to teachers, parents, and school-based professionals on how they can, as part of the school ecology, facilitate resilience in adolescents with writing difficulties in culturally and contextually meaningful ways. These recommendations are documented in Section 6.7 of this chapter.

Source: Author (2026)

Table 6.1 shows that the sub-aims of this study were achieved. Therefore, the overall aim to explore the role of school ecologies in facilitating resilience in adolescents with writing difficulties was met.

6.3 CONCLUSIONS FROM THE LITERATURE STUDY

The literature study was documented in Chapters 2 and 3. Chapter 2 focused on resilience as a multisystemic construct, while Chapter 3 focused on adolescents with writing difficulties and the impact on their lives and well-being.

6.3.1 Resilience as a multisystemic construct

Resilience can be defined as a dynamic, multisystemic process involving the positive adaptation of an individual in the presence of risk, adversity, and difficult circumstances (Denckla et al., 2020, p. 14; Masten et al., 2023, p. 20). While individual traits and competencies play an important role, resilience is not determined simply by these qualities. However, it is a negotiated social construct shaped by cultural and contextual factors across multiple levels of the individual's ecology, including meso-, exo-, and macrosystemic environments. It emerges when promotive and protective factors within these systems interact bidirectionally to help individuals adapt positively despite their struggles. Viewed in this way, resilience is strengthened not only by coping skills but also by supportive relationships, community resources, and broader sociocultural and ecological contexts (Masten, 2024, p. 2545; Theron & Van Breda, 2025, p. 9; Ungar et al., 2021, p. 2; Ungar et al., 2023, p. 2210).

Throughout this study, protective resources at the individual, family, school, community, and cultural levels were identified as enabling learners to cope resiliently with the difficulties they face.

In summary, resilience as a multisystemic construct is deeply embedded in an individual's broader ecology, developing through ongoing, dynamic, and reciprocal interactions between people, contexts, and resources available to them. In this sense, supportive systems such as families, schools, and communities work together to negotiate resources, making them accessible to individuals in times of stress (Theron & Van Breda, 2025, p. 2; Ungar, 2021, p. 10). Figure 6.2 below illustrates this multisystemic, bi-directional process, graphically summarising the resources that contribute to resilience.

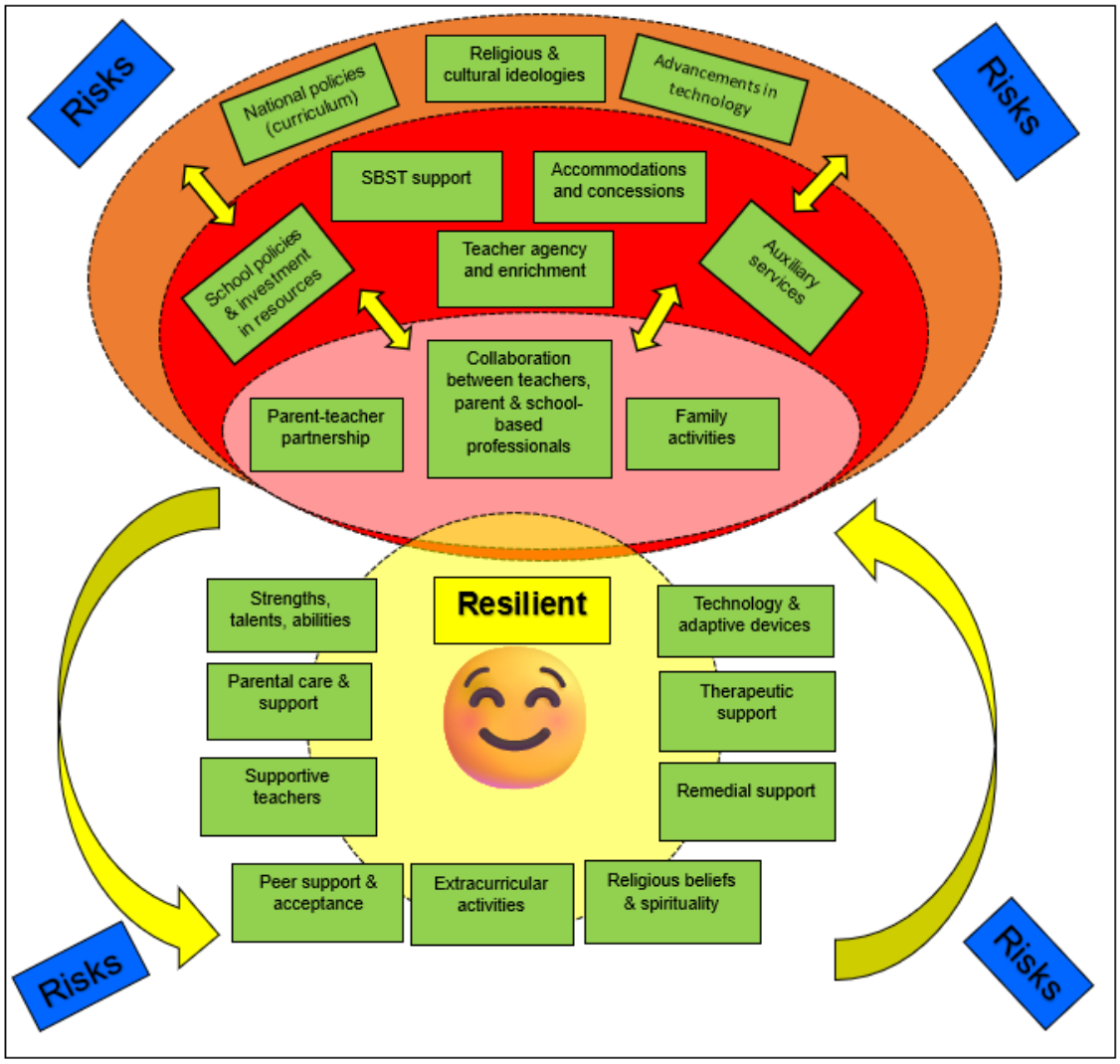


Figure 6.2: Multisystemic resilience as a process depends on interrelations between resilience-enabling protective and promotive resources

Source: Author (2026)

6.3.2 Writing difficulties posing as a risk factor

Risks are defined as any personal circumstance, event, or situation that poses a threat to an individual's health, safety, and well-being (Bertsia & Poulou, 2023, p. 3; Rutter, 2023, p. 123). The presence of risk, whether internal, such as individual characteristics or traits, or external, such as through negative experiences or environmental conditions, increases the likelihood of negative and non-resilient developmental outcomes (Ungar et al., 2021, p. 6; Mahdiani & Ungar, 2021, p. 149)

Many risk factors that threaten the likelihood of resilient outcomes can be identified. However, this study focused specifically on risks relating to writing difficulties that manifest as a result of

learners being diagnosed with a learning disability. Internal risk factors associated with writing difficulties include handwriting issues, orthographic coding difficulties, fine- motor and gross motor struggles, visual-spatial weaknesses, sensory challenges, reduced cognitive functioning in written expression, difficulty with executive functions (particularly organisation and time management), reading comprehension and mathematical reasoning issues, as well as behaviour and emotional problems (Aro et al., 2021, p. 3; Bonifacci et al., 2023, p. 2; Chung et al., 2020, p. 50; Chung et al., 2022, p .238; Dunn et al., 2021, p. 42; Gary et al., 2023, p. 17; Hen-Herbst & Rosenblum, 2022, p. 2; Kalenjuk et al., 2022, p. 28; Matre & Cameron, 2022, p. 12; Soto et al., 2021, p. 793). On the other hand, potential external risk factors associated with writing difficulties include poor socio-economic conditions where parental literacy is low, negative family attitudes towards disability, non-accommodating school environments, peer rejection, and negative neighbourhood influences (Chirowamhangu, 2024, p. 7; Davies & Soni, 2024, p. 236; Grigorenko et al., 2020, p. 47; Molise and Kakoma, 2024, p. 140; Muktamath et al., 2022, p. 2)

As stated in Chapter 2, resilience only emerges when individuals are confronted by risk or adverse circumstances (Grygorenko & Naydonova, 2023, p. 79). In other words, an individual cannot be identified as resilient if there is no risk (Denckla et al., 2020, p. 11). Recognising the risks associated with writing difficulties through the literature review enabled the researcher to determine that learners who experience persistent difficulties with one or more of the associated risk factors are vulnerable and at risk of non-adaptive outcomes.

6.4 CONCLUSIONS FROM THE EMPIRICAL STUDY

This study consisted of two cases, following a multiple case study design (Coombs, 2022, p. 3; Glette & Wiig, 2022, p. 1383; Tight, 2022, p. 400). Semi-structured interviews (Naz et al., 2022, p. 45; Roulston & Halpin, 2022, p. 680) and observation field notes (Burkholder & Thompson, 2020, p. 3; Hennink et al., 2020, p. 197) were utilised to generate data from the participants, i.e., the teachers, parents, and school-based professionals. Visual data, such as photographs, were also collected during interviews and observations.

Participants were interviewed during scheduled visits to the school, where the researcher documented observations and experiences of the events as field notes. Follow-up interviews were conducted with all participants during scheduled visits to the schools, which provided deeper insights that were recorded as additional field notes (Smriti, 2019, p. 157). As mentioned previously, teachers were initially anxious about being recorded, but during follow-up interviews, they shared more openly, offering valuable insights that helped in addressing the research questions (Milasan, 2024, p. 2; Zhang & Hennebry-Yeung, 2023, p. 1).

During these visits, visual data on the school environment, available resources, and evidence of support structures for adolescent learners with writing difficulties identified as resilient were captured. The data generated focused on understanding the lived experiences of adolescents with writing difficulties through the perspectives of members of the school ecology, examining how these members support learners and which resources enable resilient functioning. This exploration highlighted the role of school ecologies in facilitating resilience in adolescents with writing difficulties.

The data were analysed using qualitative inductive thematic analysis (Braun & Clarke, 2021, p. 330; Humble & Mozelius, 2022, p. 77). This approach enabled the researcher to suggest that resilience in adolescent learners with writing difficulties was encouraged through teacher-level practices, with teachers as resilience enablers and the school as an enabling environment. Table 6.2 summarises the teacher-level practices that were identified as enabling resilience.

Table 6.2: Teacher-level practices identified as enabling resilience

Teacher-level practices (teachers as resilience enablers)	More than 2 participants	Previous studies on resilience	Previous studies associated with writing difficulties	Not noted in previous studies on resilience	Not noted in previous studies associated with writing difficulties
Strength-based teacher perceptions	⭐	⭐			⭐
Teacher approachability	⭐	⭐			⭐
Teachers creating a sense of belonging and inclusivity	⭐	⭐			⭐
Practical support from teachers					
• Individual support	⭐	⭐	⭐		
• Task modification and scaffolding	⭐				
• Material preparation and accessibility	⭐	⭐	⭐	⭐	⭐
Use of alternative modalities	⭐	⭐	⭐		
Teacher-parent relationships	⭐	⭐	⭐		
Teacher agency	⭐	⭐			⭐

Source: Author (2026)

As Table 6.2 illustrates, most of the teacher-level practices identified in this empirical study have also been reported in previous studies on resilience. Practices such as individual support, task modification and scaffolding, the use of alternative modalities, and teacher-parent relationships have been noted in studies associated with writing difficulties, particularly dysgraphia. Other practices, such as strength-based perceptions, teacher approachability, teachers' creation of a sense of belonging and inclusivity, and teacher agency, were not reported in studies specifically on writing difficulties but are evident in research on children with SLDs in general (see Chapter 5, Section 5.5). This suggests that resilience and adolescents with writing difficulties are not overtly connected. In this way, this study contributes to theory by showing that teacher-level practices function as resilience-enabling resources for adolescent learners with writing difficulties. Additionally, material preparation and accessibility, as well as teacher agency, were not previously identified in the literature as resilience-enabling practices in relation to writing difficulties. Thus, this study makes a further contribution to the literature. Table 6.3 below summarises the protective resources identified within the school as an enabling environment.

Table 6.3: Protective resources that were identified within the school as an enabling environment

The school as an enabling environment	**More than 2 participants**	**Previous studies on resilience**	**Previous studies associated with writing difficulties**	**Not noted in previous studies on resilience**	**Not noted in previous studies associated with writing difficulties**
Technology and Assistive Tools	⭐	⭐	⭐		
Facilitators and Allied Support: • Classroom facilitators • Therapists and Auxiliary Services • Holistic Support and Collaboration • Scribes as formal accommodation	⭐ ⭐ ⭐ ⭐	⭐ ⭐ ⭐ ⭐	⭐ ⭐ ⭐		⭐
Peer Support and Acceptance: • Emotional and Social support • Acceptance and Anti-Bullying Culture	⭐ ⭐	⭐ ⭐			⭐ ⭐

The school as an enabling environment	More than 2 participants	Previous studies on resilience	Previous studies associated with writing difficulties	Not noted in previous studies on resilience	Not noted in previous studies associated with writing difficulties
• Support beyond the classroom	⭐	⭐			⭐
Teacher enrichment and Collaboration: • Professional Development and Training • Commitment to continuous learning	⭐ ⭐	⭐ ⭐	⭐		⭐
Inclusive Practices and Resources: • Commitment to inclusivity • Resource provision and environmental design • Differentiated instruction and flexible pathways	⭐ ⭐	⭐ ⭐ ⭐	⭐ ⭐ ⭐		
Holistic development: • Academic support • Extramural Activities	⭐ ⭐	⭐ ⭐	⭐ ⭐		
Cultural and spiritual anchors: • Religious practices as sources of strength • Integration of cultural identity	⭐ ⭐	⭐ ⭐			⭐ ⭐

Source: Author (2026)

All the protective resources within the school ecology that emerged in this empirical study have been noted in previous resilience research. However, not all were specifically linked to adolescent learners with writing difficulties, even though they were connected to SLDs in general. More notably, these included classroom facilitators (which were found to be common in supporting adolescent learners with writing difficulties, particularly in the LSEN school), and peer support and acceptance. While previous studies on SLDs often reported rejection and bullying, the findings showed that adolescent learners with writing difficulties were accepted and supported by their peers in both the LSEN and private mainstream schools. Learners

often received academic, emotional, and social support from their peers. These insights highlight a meaningful contribution to the theory.

In addition, religious anchors and the integration of cultural identity have been noted in previous resilience studies, but not specifically in relation to writing difficulties. This study found that when a strong religious ethos is embedded in the school and integrated into the curriculum, learners developed a stronger grounding for resilient functioning. This demonstrates that religious practices and cultural identity can serve as resilience-enabling resources for adolescents with writing difficulties (see Chapter 5, Section 5.5), making a further contribution to the literature.

Although broader community resources beyond the school were not exclusively highlighted in this study, altruism, as a resilient trait, was evident through community engagement. Adolescent learners engaged in charity drives and community upliftment projects, which functioned as resilience-enabling. This contribution has not been identified in previous studies on writing difficulties or SLDs. In addition to extracurricular activities, particularly sports previously noted in resilience studies, this study found that arts and culture activities, such as cultural dance and non-field sports (chess, taekwondo, table tennis, carpet bowls), supported learners' resilience. These findings make a further contribution to the literature.

This study also identified cultivating learners' own vegetable gardens as a resilience-enabling practice. While cultivating vegetable gardens has been noted in previous resilience studies, it has not been linked to writing difficulties. Furthermore, regarding teacher enrichment and awareness, previous studies associated with writing difficulties emphasised the need for professional development and disability-specific training. This research's findings, however, showed how teachers themselves took initiative to negotiate for resources through agency, self-learning, and alternative pathways within their own capacity. This represents another new contribution.

Finally, adolescent learners were supported emotionally and socially beyond the classroom. This included time-out sessions (10–15 minutes) in designated spaces to release emotions, as well as peer and teacher support during breaks, extracurricular activities, and across the home–school network. These insights make a further contribution to theory.

Tables 6.2 and 6.3 show that most of the factors identified by participants in this study as contributing to the resilience of adolescents with writing difficulties have also been noted as resilience-enabling in previous research, as discussed in Chapter 5, Section 5.5. This highlights this study's contribution in showing that typical resilience-enabling resources are equally relevant for adolescent learners with writing difficulties and can now be directly linked to resilience in this group.

The key contribution is that the findings demonstrate how resilience is nurtured by biopsychosocial-ecological factors operating across multiple systems involving the individual, family, school community, and environment. In other words, resilience is both ecosystemic and multisystemic, requiring the interplay of promotive and protective factors to sustain well-being and adaptive functioning (Ungar, 2021, p. 13; Ungar et al., 2023, p. 2211). Resilience is therefore not tied to any single trait or resource. Instead, it relies on a network of support systems that work together, rather than only on the strength of individual resource connections (Ungar et al., 2023, p. 2211).

In this way, this study shifts how adolescent learners with writing difficulties are viewed. It shows that resilience can be facilitated when families and school ecologies (i.e., teachers, parents, and school-based professionals) collaborate to bring about resilient outcomes for adolescent learners with writing difficulties. This perspective also encourages a broader, more inclusive understanding of resilience as a process, as well as the multiple context-specific resilience-enabling resources available in supporting adolescent learners with writing difficulties.

6.5 LIMITATIONS OF THE STUDY

The sample consisted of only two schools: one independent private school and one school for LSEN. Although there were 13 participants in total, the researcher would have preferred to visit more schools to further explore how school ecologies facilitate resilience in adolescent learners with writing difficulties. It would have been interesting to note whether mainstream schools and LSEN schools support learners with writing difficulties in the same way, and whether methods that yield resilient outcomes differ between specific mainstream and LSEN schools. Unfortunately, this study could not determine that.

In addition, of the thirteen participants, only two of the six parents from school A consented to participate. Greater parental participation would have provided broader insights into how learners with writing difficulties are supported at home and across the home–school contexts. The parents who participated were very passionate and highly motivated to support their children, ensuring resources were made available. However, it is possible that adolescent learners without supportive parents may be more vulnerable.

Another limitation relates to the inclusion of school-based professionals. Only two were invited to participate: one OT and one educational psychologist. While both professionals work closely with the learners, including a more diverse sample of school-based professionals, they may have provided deeper insights into therapeutic support and auxiliary services in promoting adolescent resilience.

Furthermore, the researcher did not include the adolescent learners themselves as participants. Had they been included, their individual, unique lived experiences could have been captured, adding valuable perspectives on how learners view support and resilience.

The scope of the study was also restricted to resilient functioning in adolescent learners with writing difficulties in grades 7–12 and did not extend to younger children in the early childhood (grade R–3) or intermediate (grade 4–6) phases.

Another contextual limitation is that the study was conducted within well-resourced communities in Pretoria, Gauteng. Learners in these contexts had access to more resources than learners in under-resourced communities and, consequently, may have been more resilient. The study would have yielded richer data had the data sample also included schools in less resourceful communities. This would have enabled the researcher to note differences in the implementation of support, such as the challenges experienced, whether teachers, parents, and school-based professionals (if available) facilitated resilience in the same way, and if adequate resources were accessible and adaptable in under-resourced schools.

Finally, the LSEN school was culturally diverse, while the private mainstream school largely adopted a religious code (i.e., Islam). The researcher's close link with the Islamic faith might therefore have introduced bias into the interpretations. However, an attempt was made to address this by applying quality criteria (see Chapter 4, Section 4.5). The supervisor also regularly acted as a peer debriefer through discussions and reflective feedback.

6.6 CONTRIBUTIONS MADE BY THE STUDY

This study makes the following contributions.

6.6.1 Contribution to Theory

- The resilience-enabling resources that facilitate resilience in adolescents with writing difficulties were explored. This addresses a gap in current literature, as limited research has specifically explored how resilience is facilitated among adolescents with writing difficulties within the school ecology. This provides insights into the multisystemic process of resilience for adolescents with writing difficulties. Providing an in-depth understanding of the research sites and participants in this study, enables other scholars to determine the transferability of these findings to similar contexts involving school ecologies and adolescent learners with writing difficulties. The findings are therefore not intended to be generalised broadly to all adolescents with writing difficulties but rather offer context-specific insights that may be considered for transfer to contexts with similar characteristics.

- This study contributes to the emerging understanding of resilience as a multisystemic construct (see Chapter 5, Section 5.5). This study noted and reported that all the resilience-enabling resources identified contributed to the resilience of adolescents with writing difficulties through interconnected systems, rather than a single resource or isolated connections between resources. In other words, this study emphasises that resilience depends on the collaborative roles of families, school ecologies, environments and cultures in facilitating resilience, and adaptive functioning (Masten, 2024, p. 2547).
- This study also contributes to theory by suggesting a new profile and understanding of writing difficulties and resilience in both LSEN and mainstream education contexts. (see Chapter 5, Section 5.5). It emphasises that adolescent learners with writing difficulties should not be viewed as vulnerable individuals. Instead, the researcher focused on the positive aspects: the strengths, resources, and promotive and protective influences that encourage learner development, achievement, and well-being. In doing so, this study highlights how these factors facilitate resilience and broaden the understanding of multisystemic resilience. Therefore, this creates a shift away from viewing writing difficulties as a deficit or learners as individuals defined by symptoms that need to be treated.
- This study also refines how some of the previously noted protective resources, namely teacher agency, peer support and acceptance, extracurricular activities, religious anchors, and integration of cultural identity, operate for adolescents with writing difficulties. The case studies show that these resources are most effective when they are culturally and contextually relevant and meaningfully interrelated (Ungar et al., 2023, p. 2201) (see Chapter 5, Section 5.5)

6.6.2 Contribution to Practice

- By identifying these multisystemic resilience-enabling resources, this study also contributes to practice by serving as a guideline for teachers, parents, school-based professionals, and school ecologies to work collaboratively in facilitating resilience in adolescents with writing difficulties.

6.7 RECOMMENDATIONS

In light of the study's findings, the researcher proposes the following recommendations for teachers, school-based professionals, parents, school ecologies, and future research.

6.7.1 Recommendations for teachers

To help adolescent learners with writing difficulties become more resilient, teachers should actively work to build teacher agency. When teachers take the initiative to independently

research and enrol in professional development courses that equip them with skills and strategies to support learners with learning disabilities, they are better able to take ownership of their professional learning and utilise this learning to encourage positive learner outcomes (Olsen & McIntosh, 2024, p. 1). However, while this study found that many teachers developed agency (see Chapter 5, section 5.5) and used it to support learners with writing difficulties, not all teachers knew how to support adolescent learners with writing difficulties. Based on that, teachers can form a community of practice (CoP) through which they can share unique insights, knowledge, and skills to develop ideas or guidelines on how to effectively support adolescent learners with writing difficulties (Daries, 2023, p. 244). Forming a CoP can further enable teachers within the network to share best practices for supporting learners in subject-specific classrooms.

Teachers should apply a variety of teaching and learning styles for adolescents with writing difficulties. Some of the more common learning styles found to benefit learners with writing difficulties include visual, auditory, and kinaesthetic approaches. When teachers use visual tools such as PowerPoint presentations or graphic organisers, auditory resources like YouTube videos, or concrete materials in class, they can stimulate learners' cognitive processing abilities, helping them generate ideas before engaging with and completing written tasks. Leveraging learners' strengths can help determine which style is most effective for each learner.

Encouraging creativity and promoting emotional intelligence through collaborative learning is also important. Teachers should ensure they use collaborative learning approaches, such as paired or small-group work, to support adolescent learners' academic, social, and emotional well-being (Carvalho & Santos, 2022, p. 16; Draper, 2023, p. 38; Shalaby & Agyapong, 2020, p. 3). Typically, when learners are paired with a more abled peer (in mainstream schools) or with peers who have similar or less intense difficulties (LSEN schools), they display enhanced creativity, show significant progress, and feel accepted within the environment. This approach also helps the adolescent learner with writing difficulties build social skills and strengthen their emotional intelligence (Collado-Soler, 2023, p. 1365). An effective peer strategy highlighted in this study is the buddy system, in which adolescent learners with writing difficulties are paired with a more able peer who can serve as a mentor and support throughout the school year. This strategy not only assists the adolescent learner academically but also strengthens their communication and verbal skills (Reid & Hamby, 2025, p. 6).

Teachers should also use AT and adaptive devices to modify lessons. In collaboration with parents and school-based professionals, teachers should include the use of AT and adaptive devices to tailor lessons for adolescents with writing difficulties. Common AT and adaptive tools that offer significant support include computers with STT/TTS software (Kambouri et al.,

2023, p. 2; Moss et al., 2024, p. 18), voice recorders, smartboards, and adaptive writing materials such as C-Pens (Alzubaidi et al., 2021, p. 2; Ramos et al., 2022, p. 2), pencil grips, specialised keyboards (Alnfiai & Kabir, 2024, p. 8), and MP3 devices. These support tools help reduce reliance on manual writing and allow learners to apply their knowledge more fluently and with ease when completing activities and written tasks. Teachers can also use interactive games in lessons to encourage participation, spark learner creativity and make learning meaningful for adolescents with writing difficulties (Han & Wang, 2025, p. 5; Jayanti et al., 2024, p. 279).

Practical support strategies such as one-to-one interaction (Ciullo et al., 2025, p. 232), re-explaining concepts, or providing voice recordings can also be beneficial. Adolescents with writing difficulties who receive one-to-one interaction (individual support) within the classroom, have concepts re-explained in simpler ways or receive voice recordings they can use at home, are better able to grasp the lesson content and manage classroom and homework activities. In addition, teachers should prepare learning and teaching materials in advance; these might include worksheet templates or pre-cut notes provided to adolescents with writing difficulties. Templates and pre-cut notes can assist with organisation and help the adolescent learner with writing difficulties remain focused on the lesson. As observed in this study, teachers prepared these materials beforehand to prevent time loss during lessons and to enable adolescent learners to dedicate more time to actual tasks.

Teachers can also designate a space near their desks to enhance individual support. This strategy can be combined with individual assistance and alternative modalities. Useful alternative modalities for assessments include visual and oral testing, which allow learners to demonstrate their knowledge to meet learning outcomes, without the pressure of writing.

It is equally important to build a positive classroom environment where the adolescent learner with writing difficulties feels safe, included and valued (Anderson et al., 2022, p. 183). When learners feel included and experience a sense of belonging, their participation increases and they are more motivated to engage in the lesson. Teachers should also ensure that they implement inclusive practices aligned with the school's policies, as this enhances both learner support and teacher expertise.

Finally, teachers should remain available, approachable, and emotionally responsive. When teachers display openness and show genuine care, the adolescent learner with writing difficulties is more likely to seek help. Such support contributes to improved well-being and adaptive functioning (Reid & Hamby, 2025, p. 6).

6.7.2 Recommendations for school-based professionals

Since collaboration is a strong resilience-enabling factor, school-based professionals should work closely with parents and teachers to modify lessons and provide targeted support that remains consistent across home and school. Considering that adolescent learners with writing difficulties present unique individual challenges that vary in intensity, school-based professionals should hold regular meetings with teachers and parents to stay up to date on learners' progress and adapt learning strategies that align with therapeutic practices. This eliminates inconsistencies and ensures the learner benefits holistically.

Because teachers and parents may not always know which practices best support adolescent learners with writing difficulties, school-based professionals can offer seminars and workshops within the community to raise awareness and share knowledge. This will enable teachers and parents to support learners more effectively both inside and outside the classroom, and can further grow into a broader community initiative. Given that teachers did not receive much formal training from the DBST on writing difficulties or SLDs in particular, efforts by school-based professionals can be especially valuable in initiating such approaches towards training.

6.7.3 Recommendations for parents

Parents can help adolescent learners with writing difficulties become more resilient through consistent collaboration between teachers and school-based professionals. When parents work closely with teachers and school-based professionals, they are able to promote transparency in learning and streamline support for learners at home and at school. By doing so, daily teaching and support practices are significantly enhanced. Parents also show their dedicated support and encouragement to the learner, which increases motivation to achieve better-than-expected outcomes (Berkowitz et al., 2021, p. 2; Twum-Antwi et al., 2020, p. 83).

As identified in this study, adolescent learners with writing difficulties can show great determination when effectively supported. Thus, parents should reinforce this determination by setting high yet realistic expectations for adolescent learners. By emphasising their efforts and praising milestones, learners remain dedicated and sustain perseverance (Burhanuddin et al., 2021, p. 95; Tahan et al., 2022, p. 18).

It is essential to take care of adolescent learners' emotional well-being while also encouraging learning opportunities beyond the school environment. This can include having open conversations with the learner to allow them to express their feelings. When the learner opens up, the parent should listen carefully and provide opportunities for the learner to release their emotions. Since adolescent learners with writing difficulties can easily experience frustration and anxiety, particularly when working on written tasks (Gargot et al., 2020, p. 2; Lopez & Vaivre-Douret, 2023, p. 6), parents can allow brief 'timeouts' in between homework sessions. In other words, create a safe, comfortable space for the learner to sit and be on their own for

a short duration. This mirrors a school-based strategy observed in this study, in which learners benefited from taking short breaks (10–15 minutes) outside the classroom to self-regulate and regain emotional control.

Nurture adolescent learners' strengths by allowing them to do what they can independently, while also helping them work on their weaknesses, can further enable resilient functioning. Parents should identify exactly what the learner struggles with and work towards accomplishing tasks through practising skills that can buffer these weaknesses. By allowing the adolescent learner to state their needs directly, parents can advocate for the learner by seeking support from teachers and school-based professionals who can further nurture strengths and ensure support in areas requiring improvement. Helping learners make their needs known and negotiating for resources strengthens support measures and resilience (Myende & Nhlumayo, 2022, p. 493).

Since learners with writing difficulties may sometimes be overlooked by their peers (Mazher, 2020, p. 309; Piko & Dudok, 2023, p. 4), parents can support them to strengthen their social skills by encouraging them to participate in extramural activities or hobbies outside of school. This can include joining a community sports club for field or non-field sports, a cultural organisation with dance groups, or a church choir. This can help adolescent learners interact more easily with others, form peer relationships both inside and outside of school, gain confidence, and build social skills.

Parents can also model resilient behaviour by actively showing learners how tasks and situations are managed successfully at home and then using this modelled behaviour to encourage the adolescent learner to develop their own solutions to challenges before offering additional support. This practice can support the learner's development of executive functions and organisational skills. In this regard, the example of the educational psychologist who used a solutions-oriented approach to enable learners to develop their own solutions before supplementing them with professional support. This approach can be used as a strong coping strategy, enabling adolescent learners to be active participants in their own development.

Spending quality time together as a family by engaging in family activities and bonding through shared experiences, or playing experiential learning games, can also help adolescent learners build self-efficacy and agency in learning (Henry & Harrist, 2022, p. 74).

Ensure that the adolescent learner with writing difficulties takes part in religious and cultural activities (Carter et al., 2023, p. 2; Mugeere et al., 2020, p. 13). This may include attending church services together on weekends or joining community events as a family. These experiences can help the adolescent learner feel included and develop a sense of belonging. Furthermore, engaging in cultural and religious practices also grounds the learner and

promotes mindfulness (Hardwick, 2021, p. 136; Naznin & Tabassum, 2021, p. 14). Social community gatherings can enable parents to advocate for adolescent learners by educating extended family and community members about writing difficulties. This may also encourage collaboration between school ecologies, which widens the resource network and strengthens learner resilience (Lehrl et al, 2020, p. 4).

While it is also important to realise that the adolescent with writing difficulties might not reach the academic standard of their age-level peers, parents should concentrate on and continuously encourage the adolescent learner to make progress by setting goals they can work towards, and also ensure long-term success (Soto et al., 2021, p. 794).

6.7.4 Recommendations for school ecologies

School ecologies can enable adolescent learners with writing difficulties to develop greater resilience by ensuring a supportive environment and a network of resources is available to help learners progress and succeed (Ungar et al., 2021, p. 616; Ungar et al., 2023, p. 2210). Supportive school ecologies can be supportive by accommodating the specific needs of adolescents with special educational needs. Such accommodations could include classroom assistants or facilitators in every classroom (particularly in mainstream schools where class sizes are larger), remedial classes with qualified remedial teachers in a school resource centre, and a range of auxiliary services on the school premises.

School ecologies also play a significant role in investing in resources for learners; thus, it is important that schools acquire and access relevant resources and ensure that the learning environment is conducive to learning for the adolescent with writing difficulties. School ecologies should particularly invest in assistive technologies and adaptive devices such as computers equipped with STT/TTS software (for example, Exam Portal, as noted in Chapter 5, Section 5.5), smartboards, smart projectors, MP3 devices, specialised keyboards, and C-Pens. These resources enable adolescent learners with writing difficulties to manage written tasks more effectively and reduce the likelihood of them falling further behind (Kambouri et al., 2023, p. 2; Moss et al., 2024, p. 18)

The school environment and the physical classrooms should also be safe, spacious, and conducive to learning. Class sizes of more than 15 learners in LSEN school classrooms and no more than 25 learners per class in mainstream classrooms can offer more effective support. When class sizes are smaller, it helps ensure that learners feel acknowledged and receive adequate one-to-one attention from teachers and assistants, thereby having a more significant impact on adolescent learners' academic achievements, socioemotional development, and well-being (Bondebjerg et al., 2023, p. 4–6)

School ecologies should also offer a range of auxiliary services, especially within mainstream schools where such services may be limited. Adolescent learners with writing difficulties can benefit more through school ecologies that provide access to school-based professionals, such as educational psychologists, counsellors, OTs, and speech therapists, within the school environment. Having these auxiliary services at school offers holistic support that addresses learners' academic, physical, social, and emotional needs. In addition, when school-based professionals are available on-site, it enables streamlined collaboration between teachers and parents, ensuring that the adolescent learner receives support tailored to their specific needs (Boonma, 2025, p. 2025, p. 54; Ndou and Omidire, 2022, p. 5)

Although these recommendations might be easier to implement in well-resourced urban schools, school ecologies in other contexts can take measures to create a resource-rich environment (Mncube et al, 2023, p. 4). With specific reference to adolescent learners with writing difficulties (or related difficulties), this might include:

- The school ecology must have inclusive education and special needs policies firmly in place so that all members of the school community clearly reflect a strong commitment to inclusive practices.
- Create a safe learning environment that ensures learners feel supported in their classrooms. This can be achieved by promoting a non-discriminatory and anti-bullying culture that reinforces the school's commitment to supporting learners' resilience.
- Prioritise professional development and training. Schools should work closely with the DBST to ensure that teachers receive training on how to support adolescent learners with writing difficulties through courses and workshops. Undergoing training also helps teachers develop agency and maintain a sense of ownership and collaboration within the school ecology.
- Because curriculum requirements differ between LSEN (differentiated CAPS) and mainstream schools (CAPS), school ecologies should evaluate the curriculum to ensure that teaching and learning practices remain effective in promoting well-being, competence, and confidence among learners with writing difficulties. School ecologies and further engagement with the DBST ensure the learning needs of learners with writing difficulties and other SLDs are adequately supported through the general CAPS curriculum.
- Support adolescent learners through religious anchors. School ecologies can allow time for prayer or spiritual reflection during the school day. This nurtures the adolescent learner's cultural identity, instils hope, self-worth, and promotes adaptive coping.

Religious practices might include individual prayer in multifaith schools or communal prayer in schools that follow a specific religious ethos.

- School ecologies can further empower learners through community engagement. Assisting in charity initiatives and community upliftment projects promotes altruism (Uranus et al., 2022, p. 211), which can strengthen learners' sense of belonging and determination. When school ecologies maintain strong partnerships with the broader community, they can raise awareness and expand networks of support for the adolescent learner with writing difficulties.

Members of the school ecology should also remain actively engaged within their social context to promote supportive strategies for learners with disabilities. Furthermore, school ecologies can ensure that a variety of resilience-enabling resources are available to adolescents within each network (i.e., between the school, home, and community). These may include sports activities, cultural activities, school excursions, and vocational programmes aimed at preparing learners for employment opportunities.

6.7.5 Recommendations for future research

Although much has been written on resilience, no studies offer in-depth knowledge on how school ecologies facilitate resilience among adolescent learners with writing difficulties. Hence, to encourage scholars to continue their research, this study's recommendations for future research are based on the limitations encountered in this study. Further research studies should include:

- A larger study that explores resilience-enabling resources among adolescents with writing difficulties, including a greater number of school ecologies and a more diverse sample of teachers, parents, and school-based professionals from different cultural groups.
- A study that examines resilience-enabling resources within school ecologies and includes adolescent learners with writing difficulties as participants. Including the learners can provide greater depth in the findings.
- A study that explores the role of school ecologies in facilitating resilience in adolescents attending schools in under-resourced communities, where support structures are limited, resources are scarce, and family dynamics may be less supportive.
- A study conducted across both private mainstream schools and government mainstream schools

- A study across school ecologies with different religious ethos, such as Convent schools, Jewish schools, Hindu schools, and other religious or cultural contexts and not just multifaith schools.
- A study where the religious and cultural link between the researcher and the school ecology is not as closely aligned as in this case, where the researcher shared the same belief system as the private mainstream school.

6.8 CONCLUSION

Through the researcher's deep-rooted interest in SLDs, it was recognised that writing difficulties, as a core manifestation of SLDs, impact learners' lives. The researcher's growing interest in how individuals, particularly adolescent learners, progress through school despite experiencing these difficulties led to an opportunity to explore how school ecologies facilitate resilience in adolescent learners with writing difficulties. Adolescence is a critical transition period in an individual's life, often seen as the doorway to adulthood. Hence, gaining insight into how members of the school ecology enable resilient functioning in these individuals was a cornerstone of this study. Being cognisant of the fact that adolescent learners with writing difficulties can progress despite the multitude of challenges they face, the researcher was fortunate to gain insights into how members of the school ecology (teachers, parents, and school-based professionals) perceive the lived experiences of adolescents with writing difficulties, how the school ecology supports these individuals, and which school-based resources were perceived to promote resilience. Through participants as members of the school ecology, it was found that resilience is indeed not reliant on individual traits or any single resource or category of resources. Instead, it relies on the dynamic interplay of resources between multiple systems involving the individual, environment, family, community, and cultural protective resources (Ungar et al., 2023, p. 2210; Ungar et al., 2021, p. 2). This study, therefore, contributes to the growing understanding of resilience as a multisystemic–ecological construct (Masten, 2024, p. 2545; Ungar et al., 2023, p. 2210; Ungar et al., 2021, p. 2).

Additionally, the researcher's interpretation encourages a shift in how adolescent learners with writing difficulties are conceptualised and highlights how school ecologies, as learning institutions, stand at the forefront of facilitating resilience (Masten, 2021, p. 5). This study focused on the resilience-enabling resources available within the adolescent's social ecology and how these resources come together to encourage resilient functioning (Ungar et al., 2021, p. 12). Thus, it shows how facilitative environments trigger the individual's capacity to be resilient and can be viewed in a more positive light, rather than merely as individuals with symptoms that need to be treated. While highlighting that resilience is encouraged through the interaction of abundant resources across each system or level of the individual's life, this does not negate their many challenges (handwriting struggles, difficulties with written expression, reading comprehension difficulties, executive function challenges, anxiety, frustration and so forth). Rather, it encourages members of the school ecology, including teachers and school staff, parents, school-based professionals and the broader community, not to overlook these learners or dismiss their struggles, but to collaborate to further their potential for resilience.

I, the researcher, conclude my study with a proverbial Arabic expression on resilience, which is meant to instil hope, determination, and perseverance. It is particularly relevant to adolescents with writing difficulties who are navigating the final years of school and moving into the world despite their challenges.

"الرِّفعَةُ بِالعَزمِ وَالهِمَّة"

(Elevation comes with determination and aspiration)

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APPENDIX A: INTERVIEW DATA

NAME OF AUDIO	**: Interview Teacher ZD**
DATE OF AUDIO	**:**
LENGTH OF AUDIO	**: 33:26**
MINUTES TRANSCRIBER NAME	**: CYBER TRANSCRIPTION**
TRANSCRIPTION LEGEND	**: RESEARCHER (R)**
	: INTERVIEWEE (I)

R Okay, um, can you please provide me with some insight into your educational and professional background that has shaped your journey as a teacher?

I Um, okay, so I started studying actuarial science when I matriculated and then didn't really like the, what you did as a job after you studied, so I switched to econometrics and got married when I was very young, when I was about 22, and I married into a family of teachers ...(laughing). So my mother-in-law, my sister-in-law, are all teachers, and I wasn't enjoying the corporate situation, so my husband encouraged me to like find a different avenue. I always enjoyed tutoring so he encouraged me to move towards teaching as a career because I enjoyed helping learners especially with difficult subjects like, or subjects they perceive as difficult like math and science. I enjoy showing them that it's actually a lot easier and more understanding than it is just something for intelligent learners or what they think is an intelligent learner, whereas it's more for everyone else. So then I started studying my teaching degree in 2020. I'm still busy with my teaching degree for senior and FET maths and physical science.

R Um, how do you understand writing difficulties and how does it manifest in the classroom as a result of learning disabilities?

I Yes, so writing difficulties obviously can show up in different ways in learners' handwriting in them being able to spell and then being able to articulate sentences or change sentences from verbal to notes. Um, I teach younger grades for maths as well, so Grade 7 maths. I found that learning or writing difficulties with them come from them not being able to take what is verbally said and change it into something they understand and can later read to remember. So if I give them a rule verbally they will look at me ...(laughing) and they're not right until I tell them please write down a note and they copy as is if you give them something on the board or project something for them, they will write down as is but I find that because they have writing difficulties they focus so much

on how to write it and writing it correctly like spelling the words the neatness of it and they don't actually realise what they're writing down. So after writing for 10 minutes, if you ask them, what did they write down? They cannot tell you because they can't focus on two things at the same time. They can't focus on writing and on understanding at the same time, and in the same way, they can't focus on listening and writing at the same time. So, especially in the classroom, it limits them in the ability to multitask, in the ability to use multiple learning techniques, because they have to focus so much harder because they have a writing disability. Um, so yeah, like I say they, you end up using a lot more time In class as well because you try to accommodate for a writing disability, um, but you'll see it in the books so either the book will be very, very neat and then they're behind with what they haven't finished by the time the period is ended, or they will finish by the time the period is ended and the book is extremely untidy because now they were rushing to get done. So it limits them in how much time they have to grasp a concept, how much time they have to make their work neat or how much time they have to actually focus on the lesson. They have to choose in their studies to say, “Okay, this is my focus. This is my priority”, and then the rest kind of falls behind a little bit, so they add a disadvantage from the beginning because they can't do what maybe the rest of the learners in the class can do.

R Um, can you discuss any particularly challenging classroom situations you've encountered and how you navigated them?

I Um, okay, so when I started teaching, uhh, obviously in the beginning you don't know if there's any disabilities in your classroom, so you don't accommodate for them from the beginning, you realise as you go along with that class, you pick up that okay, I have a challenge here, or I need to change or adapt for the situation. So in the beginning, I had a lot more challenges in the classroom, where I would write down what I anticipated a Grade 7 learner could complete in 20 minutes of writing. I would write that down on the board, and then, after giving them the 20 minutes to copy it down, I would go into the explanation part of the lesson, and I'd notice, okay, the learner is still writing, now not knowing from the beginning that you know, this is a problem, my assumption was okay, the learner is just slow. So you know in discussion with the learner, you need to work faster, you need to write faster, so that you can pay attention to me when I'm explaining so that you don't get lost and then I noticed as the lessons went in that week the next lesson the learner tried to write faster so that they were done with the rest of the class but then it was very untidy, where the learner couldn't read what was written, I couldn't read what was written...(laughing) and then for the homework that day when they went home, the next day's homework was completely wrong, why was it wrong. This

was all in your notes, then they, then you know, they'll say okay, they couldn't read their handwriting. So they didn't understand what to do with the homework because they couldn't see what they needed to do, they couldn't see the steps, because the handwriting was difficult, or their handwriting wasn't tidy. So that became a problem, like that's when I realised okay, there's a writing disability, so to kind of help that situation along I started printing notes for them instead of making them write from the board, so then I can print the notes out everyone can paste it and then I read from the notes, so it helps where the learner doesn't have to be able to read their own handwriting and they don't have to focus on multiple things at the same time. So then they can just read, highlight as we go, so then it helps with the seeing and understanding, so it eliminates one of the things they need to do, which is their challenge the writing part and then they can visually see, they can visually listen and then they can listen as they're looking, instead of focusing on writing, listening and looking at the same time. So, it did start helping; it improved because the learner could see that, okay, they can understand what's in their book. The book looks a bit neater. It's not taking them as long; they can focus on understanding and grasping the concepts more than just okay, I need to take notes. Um, so it definitely helped with that, and the homework starts improving because they could refer back constantly to see what they were supposed to do with the steps and things like that, so the notes helped a lot with helping with the writing disability specifically.

R Okay, um, how do challenges with writing difficulties impact the learner's life?

I So in a few different ways, so obviously academically like, you know, we talked about it makes it difficult for them to continue or to work in the class at the same pace as everyone else but it also impacts them in other ways, I mean they get into a mindset where they don't try as hard to make their things neat because they have this interpretation that, oh everyone expects my work to be untidy, so I will make it untidy not just in the handwriting, so even notes, cutting a note and pasting a note, because they look at their handwriting as untidy. They don't, I noticed specifically in learners with writing disabilities, they don't make their notes as neat either, where they could take a ruler, and you know, kind of draw a line and cut the line up, they just freehand cut it and paste it, and they don't take note of things like the edges being folded up and things like that. So their persona becomes a little bit more untidy because of the writing being untidy, because of the writing disability, and they sometimes don't notice that they're doing this because it's sort of part of their life, and they feel people expect it of them, and because of that, it affects their relationships with other learners. Where a learner will not necessarily want to work with this learner with the writing disability because they are now perceived as untidy,

whereas it's not them being untidy. It's just their writing disability makes the work look untidy, but to another learner whose handwriting is neat for them, it's oh, no, your handwriting is untidy. I don't want to work with you because I don't want your writing on my work. Um, they won't get asked for their books for things like, um, book check-ups at school. Um, they won't get asked by friends for their books when their friends are absent or something like that to catch up from it, because it's difficult to read. Um, their books sometimes are not used for like marking purposes, um, like a teacher won't take their book to call out answers because it's sometimes difficult to read as well. So having those things where you see other learners' books being used or wanted or needed can also affect their, you know, confidence about how good I am at something, how well I can do something, how much effort I can put into something. So I've seen that it makes them a little bit more reserved, put into their shell. They isolate a little bit from other learners, where they don't sit with their friends during or with the other learners from the class during break. When there's group projects, they don't get chosen, you know, like first they're always the last one to be slotted in somewhere because they're seen as a weaker link rather than as someone who can contribute, even if they still have strong skills in whatever they need to do. Like they might have strong communication skills, but because their work seems untidy, they seem like they are not as capable, so they don't get given the credit of being capable. So I think it affects them a lot confidence wise and because it starts from school it would probably like, you know, snowball and become something they carry into later years and they would, like I noticed for example specifically with my learners, they're a lot quieter because they don't want to draw attention to themselves, so I feel like it affects them in that, in like a growth kind of way, where their personal skills and their interpersonal skills lack behind because they don't want to put themselves out there as much.

R Um, how do you understand resilience?

I Resilience for me is if you know something's going to be difficult, but you still put yourself out there, and you still constantly try and do it, even if you fail, you get up, you try again. So literally that's saying, you know, fail, get up, try again, fail, get up, try again. You only fail when you stop trying, that to me is a resilience because you know the outcome, you know the probable outcome, but you are going against that probable outcome and saying I will prove it wrong at some point ...(laughing) however long it takes. So that for me would be resilience.

R Okay. Can you tell me about more in terms of an example?

I For like being resilient? From a learner with a writing disability or writing difficulty

perspective? So, same thing, um, uhh, if you know your answer might be wrong but you are still keen to raise your hand to answer it, you know that someone may not necessarily want you in their group, but you go to them, and you say, “Can I be in your group?” You show up every single day, even if you know someone picked on you the day before or you had a bad day because you didn't get all your notes done or something like that, you still pitch up every single day and you start your day with the best of intentions, you know, it's going to be a good day, better is going to happen, I'm going to get everything I need to get done.

R Okay, uhh, what would you say contributes to a learner coping well, and how would you identify a learner that is resilient?

I So, a learner coping well, I mean, where I would say that a learner who is willing to put themselves in a normal schooling situation even though they know they struggle is already a learner who is resilient because they're putting themselves in a situation where they already at a disadvantage. They're aware of the disadvantage, and they're still like it's not going to hold them back or make them different from anyone else. Um, coping well, I think, would be just getting your tasks done day to day, not looking at yourself as if something is different, not having the mindset of, okay, I am different, I struggle with this, I know I'm going to be behind, but working at your own pace and doing better than yourself yesterday. So not comparing to other people because that's an unattainable, impractical way to measure your success or your progress, but to look at yourself. Okay, last week my book looked like this. So this week I'm gonna make sure I underline with a ruler or you know, I skip lines in between the work to make it neater, or I'm going to use my finger to space out the words and then compare this week's work to last week's work, like oh, I improved. Okay, so I got better myself and then compare that to the next week. I think that would be a learner that I would identify as coping well because they're not looking at those around them, they're looking at their own work, and they're looking to better themselves each day or each week or each time period that they choose.

R How do you think that you, as a teacher, buffer or soften the impacts that learners with writing difficulties in your classroom experience?

I So personally, I don't, it's probably the wrong terminology, but baby a learner who has writing difficulties because I don't want them to feel like they are different, so while I will accommodate for them by like printing out notes, I won't come and give you this note and then make an announcement, like no they're getting the note because you know, they struggle to keep up. The whole class will get the note, so that it's not a thing of because of this learner, this learner got special treatment, or this learner got this, whereas the rest

of us find it unfair because that would again lead to you know more resentment towards the learner or more distinction from that learner to the others. So what is done for one is done for all of them. If there's a way that I can make writing easier for the learner, like I say, printing notes, then I'll do that for the whole class, because then it feels like the whole class is doing that. Anytime there's group work, I choose groups for the learners so that there's no, “I want to be with my friend.” I don't want to be with this person because. So anywhere that I know, because I mean, look, kids, unfortunately, without trying to be, are cruel because they're honest. They don't have that little filter yet to buffer what they think and what they say, and to put themselves in someone else's shoes to say I'm hurting this person's feelings. So if you give learners a chance to do something like pick a group, they're gonna pick their friends and not worry about those persons on their own. They don't have someone to be with. So anytime there's things that need to be done in groups, I pick the groups so that there's no feelings of isolation or left out, or you know, choosing I want the best people in my group, or I don't want you because you don't match up to my marks or my standards. I print out notes for them so that it helps with the writing, so that they don't feel that you know, they need to work faster, or they need to write faster or like their writing is untidy, and so everything's legible. I, whenever there's work to be done I start, I give them some time in class at least like 10 minutes to start the work so that if there's something that the learner needs from me before they go home I can, so I go to a few learners as well to again not isolate, so I'll start somewhere else and be like are you doing it right and I'll go to a learner and be like let me help you with this piece and then circle back to that learner. So it doesn't look like I'm only assisting that learner and be like okay, so what don't you understand and explain it so that they know better how to work forward. Um, but it's, it's little things like that. I also have the learner sitting closer to the front of the class, so it's easier to transcribe from the board, if they have to, to their books, because they can see it a little bit better and because they're in the front, then they can usually start a little bit earlier than those at the back who are still getting their things ready. Um, yeah, things like that ...(laughing).

R Uhh, what factors within your classroom buffer or soften the impacts that learners with writing difficulties experience?

I Um, some of the stuff is gonna overlap ...(laughing). Okay, so sitting in front helps. Because they're closer to the board. They're closer to the teacher. Um, so they can hear a little bit better as well while they're writing. Um, the class also has a projector. So instead of waiting for me to finish writing the work down, we can also project the work so that they can see it for a longer period of time as well. Um, we also have, so the way the class is set up as well, there's no like high shelves that they need to reach or things like that.

There's no, they don't have to move to different classes. So there's less time eliminated between periods, and how much contact time they can have with the teachers. Um, they keep their bags with them, so you don't have to keep getting up and going to fetch books all the time, which again gives you additional time of contact with your teacher and yeah, the notes, the printed notes helps the most. We can even, um, so what we sometimes do to save them time on cutting and to make it a bit neater is we use the guillotine and we just cut, pre-cut the notes, so they can paste it in already cut and then it eliminates that, okay, now I'm just gonna cut the note however, ...(laughing) because I feel my book is untidy. So it helps their book look a lot more uniform to other learners' books.

R Okay, um, what factors within the school buffer or soften the impacts that learners with writing difficulties experience?

I Um, sorry, say again what? In the school?

R Uhh, what factors in the school, as a whole?

I Um, so I think that the teachers discussing with each other helps a lot because for example if I'm having a difficulty with something, we have a very good relationship amongst the teachers and a very good camaraderie where if I'm having a problem I can discuss it with other teachers and even if they don't deal with this learner, they can then okay, why don't you try this? Why don't you try that? And if they do deal with the learner, like I've been doing this, try this, it has helped, so that we can find a more uniform way of assisting the learner as well. So it's okay, this is working for this teacher, why don't we also adapt it in the other subjects and also moving forward, like if the learner moves to a new teacher the following year, you can pass on this, this is what worked, this is what helped, build on this. Um, so in terms of the teachers that will be dealing with the learner, we've got a very good system where we can pass on knowledge, advice, ways that we can work with. Um, other things is that there's no, it's, it's the same as with group work. There's no exclusion. So whether it is a sports day, whether it's um, a project, whether it's a market day, whatever it is, the learner will always be included, and we will make it in such a way that you know they do the same amount of work as everyone else while getting the assistance they may or may not need for certain things. Um, the school also is accessible and like easily accessible, where if you need to move to a different class, it's not very far. There's not, like with writing, especially with a writing um, difficulty, there's nothing where you need to like sign in when you come into the school or things like that, and there's a lot of digital things. If you need assistance, we can print for you. We can type for you. Um, they can use the computer room if they want to type something instead of writing something because they find it faster to type compared to writing. So there's a

lot of resources that the learners that have available to them if they wanted to make life a little bit easier for themselves as well and there's lots of teachers who are willing to assist them with their time to help as well. So even if there's notes in class that you wrote and you find it's really untidy, you are welcome to go during break and say, “Can I use the computer to type out those notes, and print it, and paste it over your notes?” So that helps as well with the writing difficulties specifically. If you're struggling to draw, same thing, use the computer, put the shape on (inaudible 23:14), print it out, stick it for yourself. So you don't have to draw if you can't draw as well.

R Okay. What specific modifications or accommodations are available to learners with writing difficulties in terms of assessment and classroom activities?

I Okay, so assessment-wise, any learner with a writing difficulty that gets assessed um, and we apply to the department for them for accommodations. Those accommodations that they can get a scribe. So when they do assessments, then a teacher from outside of the school who's gone and done the certification for it comes in. They sit with the learner, and they write the answers for the learner, so that the learner doesn't is not disadvantaged because of their writing, where they don't write the wrong answer even though they know the correct answer, just because of a difficulty, and they don't have to worry as much about the time constraint because they write slowly, for example. So the scribe would write the answers for them, and the teachers would mark the answers that the scribe wrote down for them. Um, classroom activities is if there's something that you need to draw or something that you need to do, so anything that's not for marks, the teacher can assist you with, or we would print, or we would make it group work so that someone else can assist with that portion of it if you are struggling. So, for example, in technology, because I teach them technology as well. They have to do projects, and the projects are broken up into investigate, design, make. So, for the investigation part, you would have a scribe because it's writing. For the design part, you would have a scribe because it's writing. For the make, part you have to physically make something, then you are put into groups. So if there's something where you struggle with someone else in the group can take responsibility for that while you do something else. So everyone still contributes, you still feel like you're part of making the project even if you have a difficulty. And then for things like exams, if we need to draw, for example, drawing obviously, with writing difficulty, sometimes drawing is a difficulty as well. So we can do verbal testing of it. Like, how long should this line be? Where should the line go? How should I draw the line? Should it be darker, lighter, dotted? So we verbally test them, we tell them, tell me what to draw and from what they verbally tell us, we draw for them and tell them, “Okay, how should I change this? Is this right? Would you want me to

erase anything and redo anything?" Which helps them to take what's in their head and show it to us without needing to use the motor skills of drawing it themselves.

R Okay, um, are there any assistive technologies or tools which are being used or are available to support learners with writing difficulties? If not, are you aware of any technologies that could work or be introduced in the school and made available to learners?

I So we did training last term on a, it's basically like a computer exam portal. I'm not sure what exactly it is the name is, but essentially the learners get headphones that they can put on and then the computer will read the question for them, and then they can type out the answers in an answer book. And I think there's also, instead of them typing, they can say the answers, and it transcribes from uhh, text, from speech to text. So, I know we did training on it. They tested it in the June exams with a few learners, um, so that would definitely help with writing difficulties because then learners, especially with writing difficulties, usually are stronger verbally than they are in written and if you engage with them in class and you speak to them, you'll see they know the answers, but then if they do a test on their own, they don't have the right answers. And if you ask them even after the test, what would this answer be? They'll give you the correct answer, but their writing disability when they were in their own space and they were on their own, stopped them from putting in the correct answer because they were focusing on too many things, reading understanding and then writing so that helps because it changes it from a visual and written test into more of a verbal test where they might be a lot stronger than if they were left with a traditional form of assessment. So that definitely helps with the technology part. Um, also, if you use digital drawings like an iPad, for example, instead of you needing to draw a straight line, you can set it so that if you've made a little curvy line, it automatically changes into a straight line for you. So that helps with subjects like technology and creative arts, and things like that. So the school doesn't use that yet, but I do know that it's something that the Department can look into for helping with, especially technical drawing things. Um, and then the computer helps a lot with the written part of assessments.

R What resources or professional development opportunities have you pursued to enhance your teaching experience? For example, any workshops, training courses, additional self-enrolled courses?

I So, the training course we did last year with the exam portal, you had to actually train on how to set the paper up and then how to set the answer booklet up so that they can do both um, and then I have done, uhh, so I'm still studying my degree at the moment. So I

don't have that much time for outside um, courses, but I do look into things like for the technology. Like is there an easier way to draw it for the learners, because they struggle with that even the ones without writing disabilities struggle. So it's even worse for those with writing disabilities. So things like that with the iPad, with showing them stuff like that, I would go and look at YouTube videos or Google to see if someone has come up with a better way to do something for someone with writing difficulties, because I anticipate a problem now before it occurs. So I try and eliminate the problem before it happens. But I'm not aware of anyone actually doing workshops to assist things like this. There's very few people who are aware that this is a problem that you deal with in school, because a lot of learners don't actually go to a normal school. They go to a school for disabilities and don't, like you say, some learners are resilient, and like I will go to a normal school, I will you know do everything just like every other learner does, and not everyone understands that these learners are there. So they haven't looked into ways to make it easier for them, which is something someone probably ...(laughing) should do because there's a lot more learners who are going into normal schools and completing a normal matric certificate and not going into a specialised school or a home-schooling situation.

R Uhh, what recommendations would you make for improving the educational experience of learners with writing difficulties, so that resilience may be further enhanced in all school environments?

I I have discussed and like brought it up with peers that I actually feel that our education system is very one-tracked. Like we test in one way only. We test on did you understand? Can you rewrite? Can you repeat? And learners learn differently. I mean, I have learners who are very, very weak with theoretical work, but then give them a practical thing, and they outshine the top student in the class. So I feel like the education system needs to start adapting how they test and give options for testing instead of just standardised testing. Because learners are not standardised. Each learner is not the same. So you have to look at this learner is strong here. That learner is stronger there. This one's strong in verbal. This one's strong in theory. This one is strong in writing. This one's strong in conceptualising. And figure out a way to test them the same work in those different ways. So like I say with someone with learning, uhh, writing disability, sorry, don't test them a written test. Don't give them a written test because they're doing four processes instead of one, they're reading, from reading they need to convert that to understanding, from understanding they need to answer in their head and then from that answer they need to go again from verbal back into written. It's a long process for someone with a writing disability ...(laughing). Whereas if you give them a verbal test and you tell them have a discussion with me, explain to me this concept. They will give you the entire textbook on

the section without realising that they are, because they understand the picture in their head, and then they're only doing two processes instead of four. So I feel like verbal testing is something that the Department could look into, especially for writing disabilities and then practical testing is something that the Department could look into, where instead of tell me how to do it, which is two processes, do it, which is one process. You are just from your head doing what you feel you need to do. Which, in a lot of cases, we can actually do. I mean, in technology and creative arts, you can assess in that way. Because being able to do it tells you that they know the theory behind it. Instead of we want it in this format and only this format, and no other formats.

R Okay. Thank you.

RECORDING ENDED.

NAME OF AUDIO	**: Interview Therapist EP**
DATE OF AUDIO	**:**
LENGTH OF AUDIO	**: 45:33**
MINUTES TRANSCRIBER- NAME	**: CYBER TRANSCRIPTION**
TRANSCRIPTION LEGEND	**: RESEARCHER (R)**
	: INTERVIEWEE (I)

R Can you provide an overview of your background and experience in working with learners with learning disabilities?

I Okay, so, um, I started, I was first a teacher before I became an educational psychologist, so naturally that's where I was exposed to learners with learning difficulties, but, um, undergrad you don't really learn that much about learning difficulties, so you're, um, not always able to really identify, you can see something's wrong, but you can't pinpoint exactly what it is. So it took some time for me to get the experience and know what to look for, and whatever. Um, so yeah, there I was exposed to kids who had learning difficulties as a teacher and then, um, I started doing my master's in educational psychology and from there on obviously more in-depth, um, assessing children and diagnosing and, um, yeah, explaining it to teachers, parents, children themselves and trying to find ways to work around it, yeah, is that enough of an answer? ...(laughing)

R Okay, yes, um, how do you define writing difficulties, and what are the key indicators you look for during a diagnosis?

I Um, okay, writing difficulties is a variety of things according to the DSM, um, according to the DSM it says specific learning disorder, um, with impairment in writing and then it can be writing with spelling, writing with, um, punctuation, writing with, ooh, I can't remember the other one now, so there are different things, so it can be that a child just struggles with spelling and they can still write but the spelling just comes out wrong. Um, it can also be that they actually have difficulty putting what they have in their head or what they can verbally say into writing, it's almost like a message from the brain to the hand on paper doesn't go all the way, um, and then also you get some who really struggle to form the letters. So you can almost not read what they say or it takes them so long to write down the letters that it's not fair for them to be writing, yeah, so I've also had kids in the past who are very, um, good verbally and can explain exactly to you what you're asking but as soon as they have to write it, it doesn't come out, so it will be an injustice to take that writing and say that this is what the child knows but actually they know more,

they just can't put it on paper.

R Yeah.

I Uhh, what do I look for? So obviously sometimes, uhh, letter formation, shape, um, not shape, sizing, spacing, stuff like that, also spelling, um, and being able to apply spelling rules, um, some of them are not able to do that, but can do at least do basic spelling, but some cannot do spelling at all. So they will spell phonetically. Like you do before you really learn how to. Um, usually we'll compare what they can answer verbally to how they answer it when it's written. Um, yeah, you will see when they write that it's jumbled, the word order comes out wrong, or they leave out important parts, and when you ask them about it, they can give you a proper answer, but it's not what they've written. So they know the answers, and they can say it, but they cannot write, or it doesn't come out right when they're writing, yeah, what else did I answer everything? Um ...(intervened)

R Yes indicators and just the indicators.

I Yeah, so, the letter formation, the spelling abilities, the ability to write a meaningful passage, sentence and then also speed, but sometimes, um, writing speed can also be influenced by other things like muscle development, motor coordination, stuff like that, so it's not always part of writing difficulties, but can be.

R Okay, um, can you describe the assessment process you use to identify writing difficulties in learners?

I Okay, so, um, that's why for us IQ assessments are important because we need to establish if the child has the cognitive ability, because if you have, if you don't have the cognitive ability, then you are going to struggle with writing, but it's not because you have a writing impairment, it's because you have a cognitive difficulty. So, because also the DSM says the writing difficulty is the primary thing, it's not a secondary, because of cognitive impairment or whatever. So that's why we use the IQ assessments, and then also on the IQ assessment, you can interpret perceptual skills. When you look at, for instance, when they have to identify missing parts, you, it depends on their visual ability in a visual field to see differences and stuff like that, or maybe with form board where they have to fit shapes into a, you can see if they are able to visually, spatially plan and that also then transfers into writing abilities. Um, so you look at stuff like that, and during the IQ assessment, you can also pick up on behaviours that will indicate that, can indicate, um, ADHD stuff like that, because that can also have an influence on writing abilities. Um, we find a lot of the times that kids with ADHD has very poor handwriting, it just goes hand in hand, and sometimes as soon as they get onto medication, the writing also improves. Yeah, it's something that we've seen.

R Interesting.

I And it's in the I know the fine motor coordination and, um, ADHD, the deficit of concentration is in the same area as the brain, that's why it goes together. Okay, so we do an IQ assessment to get a nice background of the child's functioning, um, what their cognitive abilities is, and you also get more information on perceptual skills, stuff like that, and then we do, um, reading and writing activities to establish their scholastic ability. Um, when they are reading, we, they read the passage, and on the reading passage, we will make you know marks and stuff, and you use it as a diagnostic thing because you can see okay, they miss out letters, or they add in words, or they omit stuff, um, okay that's now reading, but the same you do with writing. When they write, you look at what they're doing, okay, they missed, they left out letters in a word, but you can see they wanted to write with, but they didn't put in the “I” for example or play, and they would just write PL, some of them will do that. So you look at stuff like that, um, and you take that with the IQ to see do they have the understanding, do they comprehend, but just cannot put it onto paper. Um you also look at the way that they write because you, you physically sit across from them when they do it to see whether they are struggling to get whatever's written and even the occupational therapists will tell you, um, looking at stuff like their, the pressure on paper will tell you there's fine motor control or there's, um, the shoulder muscle isn't stable something like that so there's a lot of things that you can get, information out of just from dating the child doing a writing activity and sometimes you can see the sentence doesn't make sense and you will ask them what did you want to say here and it makes perfect sense. So you can, you can, um, um, vergelyk, what is the correct word, yeah, you can, you can compare to what they're saying and how it's written down. So those are the things that we look at for writing, yeah, and then the ability to, to, um, for motor coordination, so for that we also have specific tests that we can do to look at motor coordination and to see how that is. If that's less developed, then it will have an impact on your writing abilities, yeah.

R Um, from your experience, what are the common challenges that learners with writing difficulties face in their academic and daily lives?

I Um, (sneezes) skies ...(laughing). R Bless you ...(laughing).

Um, okay, so for them, they would most probably, um, not all time, but if they studied and they now actually know the work but now you give them an exam paper and they have to write the answer they know the answer and they can they can give it to you but when they write it down it doesn't come out that way and they lose the marks. So they cannot show you what they actually know when it's on paper. So that for me would be the

biggest challenge, and then also it can influence writing speed, so in class they will not be able to keep up, um, not be able to complete the work, not be able to write everything down that their teacher gave them to do. Um, or they wrote something down that the teacher said, and when they get home, they can't decipher what they actually had to do. So for me, those are the difficulties that they struggle, yeah.

R Academic difficulties?

I Yeah.

R And, just general daily life?

I Um, general daily life is still okay when they're at school but I think as an adult it might become a problem when you have to complete forms and do admin paperwork kind of stuff, um, luckily with technology and computers and stuff it helps a lot you have spell check and, um, even the phones do autocorrect and stuff like that and you have text-to-voice apps so for daily life it's not such a big problem in this day and age, where you don't have to physically write down everything, where you can type or speak or whatever. So for daily life, I would say it's, it’s not such a big problem, yeah.

R Um, how do writing difficulties typically manifest in different age groups or educational stages?

I Shoo, I have to think about that properly (laughing)

R …(laughing)

I It's very difficult to see the writing ability, not very, but it can be difficult to see it in an early stage or early age, like Grade 1 or 2, because they're actually still learning that skill. So now you can't yet say that the child cannot do it because they're still in developmental phase but, um, and a lot of children struggle with, um, reversals you know where they reverse the b and the d or the p and the q or the g, um, they will write the letters the wrong way around so some people look at that and immediately think it's a writing difficulty but it's not necessarily, it can also be a problem with midline crossing or laterality or eyesight even. So it's difficult to really say in Grade 1, 2, this is it, um, but by the end of Grade 3, obviously, then writing skills should have been cemented properly, um, and basic spelling also. So if they then still cannot, it takes forever to write something down or to form the letters or still struggle to form the letters or cannot apply the spelling rule, um, those are warning signs, but we don't, we try not to diagnose it that early, because like I said, they are still learning. Um, we still want to give them some time to, you know to really get it, um, and then Grade 4, 5, 6, when they must be able to write sentences or a paragraph and it is the same, well even in Grade 1 and 2 you have to

write sentences but it doesn't have to be that complex, but when you have to write a sentence or a paragraph or be creative with the language and it doesn't make sense, the way that it's written. Um, also sometimes you can see in planning that they have difficulty, so then you'll see that they write on weird places on the page. They don't know where to start kind of thing that that can also show some writing difficulties. I don't know if I answered the question?

R Um, yes, so just the different age groups and, um, educational stages, so, um, you mentioned in the early years, but then, um, going beyond uhh Grade 6, like 7 to high school?

I You should have if, if, if children has a writing difficulty, you should have picked it up before, um, it's you won't be able to write fine and then all of a sudden by the end of Grade 7 you have a writing difficulty, because the amount of work just gets more and obviously more complex but by then you should have been able to write complex sentences, use complex language, um, use spelling rules, grammar and stuff like that. So I think if a form of a writing difficulty it might be that they can still compromise somehow in the earlier stages and it gets too hard by Grade, high school levels and then maybe you would see a then, when, when there's more complex language, yeah.

R Okay, um, how do writing difficulties typically, oh, I, I've asked that one, hey (laughing). How do you understand resilience?

I Um, so resilience, the ability to bounce back or to, um, move forward if even after hardships or, um, yeah, anything difficult that you faced, um, and, and what I've learned is that you learn to be resilient by having hardships. So if there's no, if there isn't hardships present then, then you can't learn to be resilient, so, and then that's your ability to, um, shoo, I have learned about this, but I can't remember everything ...(laughing)

R ...(laughing)

I Your ability to make, to kind of, I'm not saying it in a nice, academical language now, but to make a plan to move forward, yeah, to adapt or something like that.

R Yes.

I Is that okay?

R ...(laughing) what would you say contributes to a learner coping well, or how would you identify a learner as resilient?

I Um, okay, which, what contributes for them for coping well? I know the resilience studies say that it's not just personality, but it's environment, and it's, um, yeah, environment

and people and other influences in your life. But I do believe that you have people, that's my personal opinion, who is just wired differently to keep trying even after hard things happen to them. So for me, that has an influence on the personality, um, and then definitely the environment in terms of their upbringing, their parents, the way that the people around them, um, approach difficult situations and handle difficult things. And then, um, the opportunity to see how different people bounce back from, yeah, from hardships, yeah, I would say that. For me, that's that, that has an influence and then to identify learning that's resilient, hey?

R Yes, in terms of their disability?

I So, someone who doesn't, for me, it would be someone who doesn't, um, let the, the thing that they struggle with get them down and influence their whole, um, outlook on life. So, for instance, with the writing difficulty, knowing that they have a difficulty with that, but then also knowing that there are ways around that and that they can use whatever it is. Whether it's a computer or someone who writes for them or, um, and, and still tries to do things even though they have a disability. There are other things that you can try or things that try in a different way, um, I'm thinking now of a physical disability, kind of like, um, if they are in a wheelchair, yes, they won't be able to play soccer, but they can take part in the school's, um, wheelchair basketball. So they can still do sports with a ball. Yes, finding a way around that disability and not letting the disability influence what they can and cannot do.

R Yeah, okay. What factors do you believe contributes to the resilience of an individual or learner?

I Ahh, I knew this. We studied this, but I can't remember, but I know there are things ...(laughing), environment, like I said, intrinsic factors of a person. Um, for me, people in their lives, opportunities, um ...(intervened)

R Can you elaborate on the things that you, so if you say, um, intrinsic, as in like what do you mean?

I Uhh, so for me that would be personality characteristics, someone who's more determined, um, someone who is a problem solver will automatically, if they have the will to do something about it, um, be better because they can solve problems or they try to solve problems. Um, I think someone who's generally just more, um, optimistic. For me that does have a big influence, and then if you are exposed to people in your life that tells you, okay, I know this is hard, this is not nice, what can we do, what can we, how can we approach it? What can we do about it? We can't change the fact that you're only in a wheelchair, but we can feel good about ourselves doing whatever, doing art, or

singing or whatever, so, um, kind of like a mentor and then an environment where there are opportunities for those people to still thrive. I think if they are forced to stay in the environment where there's no, um, inclusivity then, then it is going to be hard to be resilient. Yeah.

R Yeah, okay. What factors, uhh, within the school do you feel contributes to resilience of a learner?

I Uhh ...(laughing), um, I would say the school's approach in education makes a big difference because we already, the school already plans to do things differently, to find different ways to get everyone to reach their potential, um, teachers' belief in the children and, and their guidance on okay let's, let's do something about it. What can we do? How can we approach it, um, yeah, and then I think the, in our school specifically the, we call it the auxiliary services or the therapists, that also has a big influence because all the therapists, whether it's an occupational, or physio, or speech therapist, or psychologist, can help make plans and help the learner with new methods or new ways of doing things, um, and show them new things. So they actually give them more opportunities except apart from the physical stuff, so in our school, the school environment the physical building is, is built in a way that everyone is able to, to, um, reach all the classes stuff like that because it's flat surfaced and we have sports for disabled kids and stuff like that, but apart from that we have manpower that, that, um, encourages resilience.

R Okay, what factors within your practise do you feel contributes to resilience?

I ...(laughing) Um, I think I'm repeating myself a lot, so sorry for that, um, so when I work with a child who has difficulty with whatever, emotional, social, physical or academic, I try to get them to come up with a plan to find a solution. I don't want to just give the solution, um, but obviously I am there to guide them, and then we can discuss, they can give solutions, I can give solutions and then discuss together, okay. Do you think the solution is going to work? Why, why not? What about this one? Why, why not? Okay, which ones are you willing to try? Let's try them and then come back to me and tell me which one worked, which one couldn't you do, um, for instance, if a child struggles with social, um, interactions, um, or they feel like, yeah, so what can you do about the kid who's always mean to you? Are you just going to tell the teacher are you just going to ignore them, or you're just going to run away? Are you going to tell the other child that they are hurting your feelings? Okay, so then we discuss the options. The child must say what thing he or she is able to do or to try, and then obviously I encourage the one that's more mature, because one day, when you're a grown-up, even you'll have to be able to face a person who's not treating you well. So I try to guide them in that direction, but they

must also come up with a plan and yeah, be part of the plan. Does it make sense?

R Yes, it makes sense…(laughing). Does it work like that also, um, with learners with this, you know with their learning disability, so if they come in here, um, obviously you know they have the disability and it you know like you said it could affect them in a variety of ways, so it's obviously it's the academic, but having challenges with academics like you said can also influence their social life maybe they get picked on or bullied, um, it can also, the emotions because they might feel they're not good enough. So do you mean, so for in all those instances, that's how you manage to promote their resilience basically?

I Yes, and I think, um, we'll look at the system or look at the system for that child for that specific child. So what do you, what do you personally have that are, um, good, um, talents or good, that you're good with or whatever, and, and what can we work with? Okay, your talent is, yes, maybe you cannot write very neatly, but you, um, are very good at remembering facts or verbally saying what you mean. Okay, then, how can we use that to help you? Okay, so we will have to look at every part, and then obviously we can also look at the system, so that with that I mean the school. What in the classroom can be done to help you with your difficulty? If it's a child with, um, reading and writing difficulties, we have the resources of people who can help and assist them with that. So they still get access to the information. We are not ever going to take the reading ability, ability, uhh difficulties away that's always going to be there, but we can alleviate some of the effect thereof. So by, by still giving you access to the information when someone else reading is, is reading for you, um, we are helping you and, um, also in accepting I think that you have certain disabilities, and then also the environment can go further than that, um, where it goes to your house. What at the home can you do to still do your homework even though you have learning difficulties? Will you need a tutor, will you use a computer, or will you have an arrangement with a teacher that you just do a verbal recording, um, yeah. So okay.

R Okay, how frequently do learners attend therapy sessions, and which therapeutic approaches or interventions do you, do you find most effective, uhh, for adolescents, so the older ones?

I Oooh, okay, so therapy at the school is quite difficult, um, especially for the younger children to get them to regularly come because, um, it, it is difficult for them with as, as, as, as emotional therapy. With, with occupational therapy and speech therapy, they have an assigned time that they go to a therapist, and that's different. Okay, so with emotional therapy, if they have to come to us, we'll have to use, um, a lot of projective methods like playing and drawing and, and stuff like that to get what's bothering them, um, to work on

that and then it depends on the child. So we don't have a lot of kids who, whose on a permanent therapy basis at the school. Also, when they get to the stage of being teenagers, they withdraw. They don't want to come to the school therapist, and they see you as part of the enemy ...(laughing). So that's bad. Some of them will, but a lot of them don't want to come and open up at school; they somehow, I think they are worried that you might talk to the teacher or your/their friends might see they're going to the psychologist or whatever. Um, therapeutic approaches, especially now with writing difficulties, would be solution-based, find solutions, um, and sometimes you will, you will use, um, CBT if a child has, has, has problems with the way they, they view their learning difficulty or themselves, um, but I think most psychologists will tell you in practise that no one uses one therapeutic approach. It's always a mix of stuff, whatever applies to that situation and that child. With some children, you can go deeper, and with others, you have to be very realistic and just think of a practical plan. Does it answer your question?

R Yes. Can you discuss any specific tools or techniques you use to help learners improve their writing and organisational skills, um, in the classroom and at home? So basically, yeah, any tools or techniques that you teach them or like you say, you give them and that they can apply it in the classroom and at home?

I The thing is the occupational therapists, um, work specifically with that because it's more their field, it's, it's motor coordination, it's motor planning. So that's not something that we specifically do, um, and when a child has writing difficulties or a writing learning disorder, like I said earlier, we won't be able to ever take that away, we can just make it a bit better or a bit less intense or whatever. So, for from a psychological point of view, um, we'd rather try and change the way they, not change but improve the way that they, um, see themselves and, and their disability or their difficulty, um, what was the rest of your question?

R Um, specific tools or techniques that they can use to improve their writing and organisational skills in the classroom and at home.

I Yeah, it will be very, very basic practical skills, for instance, when you get into class, immediately take out your book, put it on the table and wait for the teacher to say, “Okay”. Basic stuff like that. But there's a lot that you cannot really change because if the child has ADHD, for instance, part of ADHD is difficulty with planning. You're not going to change that. Medication might help, um, occupational therapy early on in their life helps, but at some stage they will, most people will also tell you older people with ADHS will tell you that they have learned their own coping mechanisms, and they didn't really know it

when they, when they got that coping skill, but only later on in life realised that's what I did to make sure my work was always done, kind of thing. So it's very difficult to really have a one-size-fits-all plan there, um, yeah and, and it will be a lot of trial and error but something that occupational therapists might do is say for instance with little ones, with foundation phase kids, is to write letters in sand and in, build it with clay, you know do the sensory stuff and say the letter and see the letter and stuff like that. But for a, for a, from Grade 4 onwards, where the work is, the amount of work is a lot, if they have a writing difficulty, to force them to practise more writing is just torture. It's not really going to change much, yeah.

R Yeah, okay, what role does modern technology play in supporting learners with writing difficulties, and are you aware of any assistive technologies or tools that would further support learners with writing difficulties?

I Yeah, so, um, I know what the LSEN schools use, and we are hopefully also getting that next year, is a voice-to-text programme, where children, where a child can say and then the computer types it. So that makes a big difference. We try not to completely take the writing skill away from them, even if they have a writing disability, except if it's from severe physical stuff, like we have kids who don't have arms. I mean, you can never force them to write, but if a child is still able to write it's just slow or just comes out wrong or whatever, we do want to give them opportunities to write, because somewhere in your life you are going to have to be forced to, to write. So we don't want to take that completely away, but when it comes to school stuff and important work, and when information is so computers, but when if a child struggle to, struggles to write, they will also struggle to type, because it also goes to planning and getting what you have verbally or what you have in your head, to put it onto paper. So there you will use the voice-to-text app, um, that will work best. Um, what we also use, but that's human resources and, and then that's costs more, and it makes the child more, um, dependent is to use a person to write for them. Um, yes, oh sorry, I just wanted to say, we also have kids that that has like the one boy has osteogenesis imperfecta, which means he has brittle bones, and I can't tell you exactly the medical, um, reason, but they/he struggles to write. It's like his hands are weaker, but he still writes, but when it gets too much, he will be able to type, and it's, it’s also going to make him, um, tired, or he's also going to struggle but less than physically writing, yeah.

R Yeah, how do, how would you say do teachers or the school staff in general promote the resilience of learners, and how do you work together to create a comprehensive support system for learners with writing difficulties?

I Okay, what was the first bit?

R Okay, so the first part, how would you say do teachers and the school staff promote resilience for the learners, and how do you work together with them to create a comprehensive support system for these learners with writing difficulties?

I Um, okay, how do teachers promote resilience? Well, I think that's, I'm gonna repeat myself now, but that's in the approach of, of giving the children different, um, opportunities of doing things, um, being a bit more creative in how kids need to present or do something. It doesn't always have to be a written activity, um, helping them think of ways. So, trying to get them to think of solutions, but also helping, um, we don't want to think of the whole plan ourselves, as adults, we need them to also. Um, and then doing what, what was the rest of the question?

R How do you work together to create a comprehensive environment?

I Okay, so, so, with that, I will often say to a teacher, okay, this child has this difficulty or this disorder or whatever, that means he cannot read or write or whatever, so you cannot give him a hundred words to go and practise for spelling, because you are just torturing him. He's never going to be able to do it. With him, spelling isn't the most important thing. With this child, we just need to get him into a functional level. So for me to explain to teachers and to parents what the child is able to do or not do and what is realistic, I think that's the biggest, um, important part for me to play in this.

R All right, uhh, what community resources or support systems do you recommend for families of children with writing difficulties?

I ...(laughing)

R If any ...(laughing)

I Um, no, there isn't much. I Google, I know Google also have voice to text, um, so and that's free, but all the other stuff that I know of costs money. I think on Word there's also a free transcription thing where you give audio input, and it transcribes it to writing, um, sorry let me just see, um?

R Community resources.

I Community resources ...(intervened)

R That you recommend.

I The school by itself is a community resource, that's what I would say. So if you have a child who really has difficulties, to put them in a school that can assist them, um, yeah and if a family can afford to buy a programme like that, it's very helpful, it is, um,

unfortunately, all of it costs money. So that's why I was saying the only free stuff is that I know of Google, and I think there's one on Word. But, still, you then need a computer, or a cell phone or whatever. So it's quite, it's quite difficult if you don't have resources.

R Okay, okay, um, how do you, how do you or the school community assist families in accessing these resources?

I ...(laughing) I think mostly by information, giving them information, explaining to them how it works and what's important, um, as soon as we know of something, we will always inform the parents and tell them about it. Um, and the school spends money on resources like that so at the school we do a lot, but I think, by sharing, information is the, is the biggest thing that we can do to help the families, um, and to explain to them what they can expect. So still let your child write if he is able to write, but don't torture them, kind of thing ...(laughing)

R ...(laughing) Yeah, okay, um, is there anything which I may have left out which you would like to mention or discuss? So anything relating to, basically anything about the resilience of, you know, a learner with writing difficulties in terms of their emotional behaviour or in terms of, you know, maybe there's anything?

I Yeah, I think it's, it's, it's, it sounds kind of straightforward, but it's very complex because every child is different, um, every child goes through different phases at different times, um, especially when they get to the age where they have to start discovering their identity. It's like they are faced with their disability again even though they were maybe born with it, it's like again now they have to integrate this disability into their identity which are only still developing and, and that has, that's difficult because teenagers just as teenagers are emotional beings and has difficult time, has a difficult time to figure themselves out now you're adding something like this into the, yeah, into the soup kind of thing. And then also I think I think people maybe don't always realise how much of an influence a child's scholastic abilities has on their self-esteem, emotional well- being, social well-being as soon as they are not able to do what they need to do at school they don't experience success at school, they don't believe in themselves, um, it makes them harder, harder for them to have friends, to have a good self-esteem to try new things, um, and sometimes kids can't tell you what they struggle with at school. They just know they struggle but they can't tell you exactly what it is and where it is that they have difficulty but the whole school day is just really tiring for them and I think there are many, many kids in South Africa who has difficulties and it's never identified and they just have to struggle through the school system until one day it's too late or hopefully they are, can compensate in some way. Some schools are very supportive in finding ways to help

children. Some schools don't have the resources to do that. So I, I just think it's a, it's a complex thing, and it's not only the, the, the disability or the difficulty, it's, it's the child, as a whole, gets influenced by all of this, yeah.

R Thank you.

RECORDING ENDED.

NAME OF AUDIO	**: Interview Parent M**
DATE OF AUDIO	**:**
LENGTH OF AUDIO	**: 20:50 MINUTES**
TRANSCRIBER- NAME	**: CYBER TRANSCRIPTION**
TRANSCRIPTION LEGEND	**: RESEARCHER (R)**
	: INTERVIEWEE (I)

R Can you describe what is writing difficulties and how you first became aware of it?

I Okay, uhh, we're talking about my child now, right? So, with him, there was no writing difficulties. When he was in Grade 3, I did notice that he wrote very untidy but like towards the end of the year, I saw that his handwriting was improving, like the last few days actually of school and then I asked him, how come your handwriting is so neat, who wrote that for you and then he said, no, I wrote this from the book and the rest was written from the board. So, I realised he had a, uhh, a problem with his eyesight. So, that's one of the problems that he had with being able to write, but once I got in his spectacles, it became much better and his handwriting improved drastically and till today, he writes quite neatly. He doesn't have a challenge with writing. The only issues that I feel like he writes like certain letters in a very curvy way, sometimes I struggle to see it, but otherwise, he's got a very neat handwriting.

R Okay, how do you, how did you first notice the signs of writing difficulties in your child? When was your child officially diagnosed with a learning disability, and what was the process like?

I Okay, so his learning disability was only realised when he failed Grade six. Then I didn't know that he had a problem, but then I took him to an educational psychologist to have him assessed, and then we realised that he had um, a lot of, we didn't know about the dyslexia at that time. We just thought that he had ADD, not ADHD, he's not hyper and uhh, so they recommended that I sit with him for all his subjects and then they told me that his reading is below his age group and all of that and then I took him to a smaller school where they gave him individual attention so he did Grade 6, 7, and 8 there and he got his confidence back. It's actually a school that deals with a lot of disabled learners. So he saw the resilience of those learners, and he became much more confident in himself, and he started working harder, and then it only stopped at Grade 8, and then I needed to find him another school. So I put him in, I'm not going to say the name of a school and I found that at that school, he thrived with his friends and peers, but

academically he was falling again and then, uhh, I needed to bring him back here and reintegrate him with his friends because he was at the school when he failed, so I didn't want him to face his friends but he was ready to come back and when he came back into the lower Grade, he was fine. He made friends again, and he managed. So let's check if I answered your question. Um, yeah, let's go back. Yeah, so when I found out, he was in Grade 6.

R Okay. Um, how do you think writing difficulties affects your child's daily activities and academic performance?

I So that is not his uhh, weakness, right, his weakness is more of, um, hearing. So his hearing is a problem. I mean, it's his strength, actually. He's an auditory learner. So seeing and writing and all of that doesn't actually help him. He needs somebody to read to him. He needs a reader. So that is, his writing is actually fine. I don't have a problem with that. If you look at his books, he even writes neater than I do, so I don't know if I'm a candidate for you.

R Okay, um, so in terms of the writing, it could be also like, um, not the physical aspect, like where you say it's illegible or things like that, but also with, um, comprehension or getting the thoughts down to paper.

I Okay, with the comprehension, there's definitely a big problem, and yeah, you're right, getting the thoughts down to paper. He doesn't write it in order. He writes it like, like he has an idea in his head, and he thinks that he, it flows well, but when I read it, then it doesn't flow and he can't understand why it's not right because in his head it's correct, if that makes sense. So he has the whole story correct, and if he tells it to me, then he says it nicely, properly to me but if he writes it down, it's like very scattered.

R Okay, okay, so how does that, um, affect his daily activities and academic performance?

I So because of him not being able to write in a flowing manner, his academic performance, he gets the answers wrong because what the teacher is looking for is not what he's writing, sometimes with the comprehensions, I don't know, he's just like, I think maybe what he does is he sees one word and he just writes about that word or something like that. He doesn't read the entire sentence properly and write the correct answer to the sentence. So I see that that's the problem with most of the subjects that he does. It's like he's doing the math-lit, he's doing the history, the tourism, business, all of those subjects require you to be able to comprehend and read and write correctly ...(laughing) and so that's where his weakness lies, but it's mostly the comprehension issue, yeah.

R And in terms of spelling and all that?

I Oh, spelling. He does make a lot of mistakes with the spelling, also. Yeah, he does make, it's just that he writes neatly, so I suppose I look at it that way, but he does in his writing, his spelling is an issue, his comprehension is an issue, and his reading is an issue.

R Okay, so that basically has an impact? I Yeah.

R Okay. Can you share specific challenges that your child faces during, I mean due to writing difficulties?

I Any specific … I know his challenges is more of his zoning out difficulties, where he, the ADD part, where he can't keep up. Like you know, he blanks out after two minutes of talking to you, then he's like somewhere else, you know, so that's his problem. So maybe he's not writing what he should be writing, making notes when the teacher is talking. So maybe that's his weakness, that he should do that more. Um, did I answer the question?

R Specific challenges.

I So what can I say there? Um, not writing enough. I don't know. In the writing, I don't know, I can't, because I'm telling you what his problems are.

R Okay. Um, how would you define resilience?

I Strength, determined to move on, to carry on, and improve yourself and do better. He's very resilient ...(laughing) because when he was in Grade 9 at that other school that I put him into, so I moved him from the home school to the normal school again and I told you he wasn't doing well, he was dropping and in Grade 9, I didn't know what to do, because he was actually failing at that school again, and I was like, oh, now what do I do and then I asked him, let's stop here, finish Grade 9 and then go into a Technikon or something like that and he refused, he's like, no I will finish matric. ...(laughing) Even if I have to repeat it, I will finish matric, and so that showed me his strength and his resilience, and I was very proud of him. And so I tried to get him tutors and whatever I could to help him, you know, carry on and when he came to the school in the beginning, he came last year, he was still doing really badly and by the end of the year, he actually managed to do well, and this year he's doing even better so I'm very proud of him and he works very hard. Although he has all those issues, he sits at his desk, and he will work and work, even though he's zoning out, he'll push himself, and he will stay there, right, until like 8, 9 o'clock at night. From the time he goes home, maybe he'll just eat, and go to his desk, and sit and push and push and push, so even though it's difficult for him, he really strives, he really works hard, so for me, he's an A student.

R Okay. Um, do you think that resilience only depends on an individual or the learner themselves?

I No, I think it depends on everyone that's involved, including the teacher, the principal, the whole, his class, everyone, so obviously if the students are going to demoralise him or tell him something that's going to hurt his feelings or make him feel bad, then it will make his resilience less and will make him maybe not but because his class is, in a class that's very motivating and encouraging, his teachers are always there, like all his teachers, his siblings, everyone is always encouraging him so I think that really helps him to be resilient.

R Okay. What else could contribute to resilience of an individual?

I Like I said, he's got very good friends. They really like, they really motivate and encourage him, not only academically, physically, like, you know, now they're giving him diet plans and this and that and a lot of things, like it's very important, the people that you surround yourself with and obviously the parents play a very great role in it, so everyone plays a role, whoever is in contact with the child plays a role in his resilience.

R Okay, but can you elaborate, um, in what ways?

I Um, so you say there's peers, there's the parents, teachers, um, so, for example, in what ways do they contribute?

I Okay, so the teachers, they are aware of his problem, right, so I've made them aware, and the school has allowed for him to use an exam portal where he can listen to auditory reading of his exam paper, so that's the principal and the school at large. Each teacher will come; they know that he loses focus, they will come and prompt him to keep focusing. You know, although they have a class of 30, they'll come and tell him, okay, in this exam, focus, focus on this for the essay. I know you can't remember everything, but remember 50%. They, like, really try their best to make it easier for him. They break his work down into small, they'll come and tell me, okay, focus on this, focus on that, you know, just to help him, like, smaller, but, you know, instead of learning so much, they give him less to learn so that he can focus on that, at least to pass, you know, so then if he can manage more than that, he moves, like, a little bit faster and learns more and he's actually doing okay now.

R Okay. Um, would you say that your child is resilient, and why do you say so?

So this might sound like a repetition, but ...(intervened)

I Yes, I do think he's very resilient because he works harder than anyone I know, right, he puts in the effort, and he's very, he doesn't let anything make him sad or demotivated.

He said, he put his mind to, I'm going to finish Matric and he makes sure that every day he puts in the work, so I think he's very resilient, like a lot of children would lose hope or be lazy, you know, chill, whatever with their friends, but when it's exam time and stuff, he's just very focused, in his own way, you know.

R Can you give me examples of how your child has demonstrated resilience, overcoming the challenges that he experiences every day?

I Okay, so every day I know that his homework is difficult for him, especially with Afrikaans, because he has so many barriers. Afrikaans is even more difficult for him, so he sits, and he tries to memorise the whole back of that, um, study guide, which has all the vocabularies that you need to know. So every day I see him sitting with that and trying to memorise. Obviously, his memory span is very short, so, like, what he learned today, tomorrow he'll forget it again, so he has to come back to it, so I see the resilience because he'll still come back and he'll relearn it again, and he'll carry on like that, although he struggles, he pushes forward.

R Okay. Is there anything else?

I Like with the math, uhh, I know it's difficult for him to understand but it will take him something that will take me, like a minute to write down, it will take him an hour, but he'll sit with that question, but he will sit, and he will finish it.

R Okay. Do you think that you, as a parent or as a family, has contributed to his resilience, and in what ways? Provide examples.

I I hope so ...(laughing) but I think because I'm a teacher and I know, like, um, he's struggling and I know I've put my kids into the special needs school, him and his sister, although she didn't really need it, I saw what those children go through and what they need, so I kind of understand what they go through, so with him, I hope that I'm always encouraging him to do better and I don't, like, if he does bad or he fails, I always say, you know what, you did your best. It's good for me; you don't have to do it. Just do your best, and it's good enough. So I hope that I'm not putting a lot of pressure on him in that way, helping him to be strong enough to have that resilience, uhh, but his father has a different approach to me. He tells him, no, you can, you must do it, so we have, like, different personalities, so he pushes him, and I tell him, no, it's okay, so he has that little bit of encouragement and motivation from him and that, you know, it's okay from me, so I think that his parents do help him in that way.

R Okay, um, are there specific family activities or routines that you find helpful in fostering a supportive environment?

I Uhh, so at the moment, I have three children in FET, so him, in 11, Grade 11, and his sisters are in Grade 10, and my eldest son, he's already done with his degree. He's working. He did computer science, so, uhh, I think the big brother really helps because the big brother, he did computer science, so he's very fast- minded, like, he can grasp things very quickly. So when this Grade 11 son of mine does something silly or makes a mistake, then that one's, like very snappy with him, which will make him actually want to be at his level but he knows that he has me to support him in case the big brother is, like a bully, ...(laughing) you know, so he, like, he'll tell him, Azad, that doesn't make sense. I said his name, but okay, it doesn't make sense. Go read it again, and I'm like, no, it's okay. Just fix the sentence up. What's wrong here in the sentence, and then he will, so he's got, like a balance like that and routines, like, we all get together for supper. The brother doesn't live with us, but he comes home also for supper every day, and so we have like family conversations. We talk about school, whether they had a bad day or a good day. If it's a bad day, then they'll tell us, and we'll try and encourage him, or you know, if he got a bad mark, he'll still tell us and then everyone will tell him, no, it's okay, don't worry. We're proud of you, so I think all of those things help his resilience, and everyone's aware that he has, um, the ADD and like, all his problems, because we've been through with three different educational psychologists who confirmed, you know. And to see how far he's come. We're so proud of him, and everyone's always trying to help him, and because he works so hard, you know, we all try to encourage him all the time.

R Okay. Um, how does the school promote resilience? What factors within the school do you think promotes resilience in your child?

I So I think in our school, this school specifically, we do Tadzakur. We teach the Qur'an, and it teaches us how to be, the Qur'an is the best way to learn resilience because it teaches us about all the prophets and their struggles and how they got through it and the fact that they are doing it every day in school, it really encourages them, like, stories of (inaudible 17:01). You know, all the prophets went through, the prophets of Allah Islam went through immense struggles, and we're learning about it, so our struggles are nothing compared to what they went through, so it makes us much stronger.

R Okay, um, anything else in the school that the school provides support academically?

I Um, the school does do remedial with them, remediation. They give them extra classes when necessary. Um, it's mostly the teachers that will stop him in class and say, "Okay, fix this or fix that", especially, I've noticed, like, history and, um, math. You know, the classes are not too big, so they can manage with them, and they really go out of their

way to encourage, help him, show him where he's going wrong, tell him to do past papers, you know, so he's always busy doing past papers. They provide it for them. They give them the memos. It helps them.

R Okay, describe, can you describe any community resources or support groups that have been beneficial in supporting your child's resilience?

I Um, community groups? I don't think there's time for that, but, um, ...(laughing) there's no time in Grade, with three kids in FET now. They're all sitting every day and studying, and then just on the holidays they just want to chill a bit, you know, but what can I say, Okay, so when they do have community, uhh, gatherings, like with the Palestine marchers and with what else does he go for, he goes for charity drives where they see the poverty in the area, and they try to help those people. Then they appreciate what they got, and they try to do better for themselves, so that also helps his resilience, and it makes him grateful, and it makes him to work harder.

R Okay, how will you continue supporting your child's growth and success as they progress through school and into adulthood?

I Okay, so I will always be there for him no matter what, and he knows that and wherever I can help him, I will. I don't know, for me, it's like the first time that I'm going through this as a parent because my three other kids, they're okay, like you know, they're fine. So, uhh, we all know that we're going to all support him, like the whole family will stand by him no matter what and everyone like will be there for him. If he goes to, inshallah, he wants to go to university and he wants to study um, art design, so he will need a matric pass to get into that but if he doesn't, then we will support him and we will put him into, we will find any other colleges or wherever we can find a place for him, and we will make sure that he pursues his dreams and he will, inshallah, get to where he wants to be and it doesn't mean that it has to be one straight path. It could be a path that winds, and we'll be there to support him, and if it doesn't work out, we will be there to resource and find other resources for him to help him to get where he needs to, and if it doesn't work out, then we'll help him find something else that he can do. You know, there's always many ways, as long as eventually he gets to where he, I mean, even we don't know where we were supposed to end up, but we came, you know, to where we are. It was a long path, and inshallah, he will find his path, and he will find his way, but, on the way, we will be there for him, inshallah (laughing)

RECORDING ENDED.

APPENDIX B: EXAMPLE OF OPEN-CODING

Understanding resilience

How do you understand the concept of resilience?

School A

Subthemes	Quotes
Concept of resilience • Ability to push through • Willingness to move forward • Not giving up, persevering through challenges • Coping with challenges • multifactorial • Determined to move forward • Multiple role players • Parents' integral role • Persevering through difficulty and moving forward • overcoming challenges • self-expression, moving forward • Parents' role, multiple factors • Guidance from parents • Getting back up from difficulty • withstanding difficulty • Trying after failure, not giving up • Moving against negative outcomes	Because you know you have an issue and it's difficult for them, but they've sort of pushed through. And then sometimes the marks, the marks show their effort, you know, and they motivate it, and then sometimes it doesn't, but they're like, okay, next time I'll try. Ma'am, what did I do wrong? How can I better myself? And that shows resilience (T3, School A, p. 5) Ability to push through I think the ability to cope and to, you know, work through challenges and to be able to persevere. That's what I think resilience would be: being able to, you know, get things done and like to try, you know, and not easily give up (T5, School A, p. 6) Not giving up, persevering through challenges Basically, it's the coping with all these difficulties in your life (P1, School A, p. 3) Coping with challenges No, I think it will affect everyone (P1, School A, p. 3) multifactorial Strength, determined to move on, to carry on and improve yourself and do better (P2, School A, p. 5) Determined to move forward I think it depends on everyone that's involved, including the teacher, the principal, the whole class, his class, everyone (P2, School A, p. 5) Multiple role players and obviously, the parents play a very great role in it, so everyone plays a role, whoever is in contact with the child plays a role in his resilience (P2, School A, p. 6) Parents integral role So resilience is being able to persevere through any difficulty, like continuing or moving forward, no matter what the difficulty is, being resilient (T1, School A, p. 3) Persevering through difficulty and moving forward So if they face challenges, they are able to overcome those challenges and move forward, or move on, continue with their life (T1, School A, p. 3) Overcoming challenges Like if they have a problem with an emotional problem, they are able to talk about it and overcome it and move on to the next chapter of their life (T1, School A, p. 3) overcome challenges some learners are able to express themselves, and if they can express themselves and move forward, that would be considered as being resilient (T1, School A, p. 3) self-expression, moving forward Okay, so I personally feel that there's a lot of factors, there's many factors that has an impact on their emotional well-being or their academic performance, it's not only their home life. It will also be their relationship with their peers in class, or it could be the fact that maybe they weren't groomed from a young age, maybe they have both parents, but from a young age, their parents didn't groom them in the sense that made them read at an early age or their foundation at school may not be strong, so I would say that it's a combination of

Subthemes	Quotes
	factors, it can be a combination of schooling life, peers, your home life, your teachers, your environment that you live in, all of those things have an impact on your resilience (T1, School A, p. 3-4) Parents role, multiple factors wouldn't it also be like the guidance that you get from your parents, like if your parents are resilient and they learn by example, then they would say, "Okay, you know what, my parents are resilient and my parents overcame this so, I'm also capable of overcoming this" (T1, School A, p. 4) Guidance from parents So for me, it's when you are put in a situation and it's like life keeps getting you down, but you don't let yourself stay down and you just keep getting back up and trying your best irrespective of failing a hundred times and hoping that your effort at some point does pay off and that you do succeed in what you want to achieve (T3, School A, p. 4) Getting back up from difficulty Resilience, it's like to persevere basically, to, to like continue and to withstand whatever challenges you may be facing and to like at the end of it be successful (T2, School A, p. 4) Withstanding difficulty Resilience for me is if you know something's going to be difficult, but you still put yourself out there, and you still constantly try and do it, even if you fail, you get up, you try again. So literally that's saying, you know, fail, get up, try again, fail, get up, try again (T4, School A, p. 6) Tying after failure, not giving up You only fail when you stop trying, that to me is a resilience because you know the outcome, you know the probable outcome, but you are going against that probable outcome and saying I will prove it wrong at some point ...(laughing) however long it takes. So that for me would be resilience (T4, School A, p. 6-7) Moving against negative outcomes

Subthemes	Quotes
What constitutes a learner coping well • Sustained engagement • Able to work through tasks • Support system • Persistence, ability to continue • Able to work through tasks, positive self-esteem • Willingness to achieve without comparison • Seeking to improve, persistence • Able to work through tasks with minimal or no support • Resourceful support system • Possessing resilient traits	I think not having that pressure also helps them cope well. Identifying a learner with resilience. I think it's those learners that even when they're not doing well or you know they have an issue, but they come to you, and they're like, okay, I got that mark, or how did I do? And they want to know how they did, and they just don't stop caring about their school work. And for me, that's resilience (T3, School A, p. 5) Sustained engagement *Because you know you have an issue and it's difficult for them, but they've sort of pushed through. And then sometimes the marks, the marks show their effort, you know, and they motivate it, and then sometimes it doesn't, but they're like, okay, next time I'll try. Ma'am, what did I do wrong? How can I better myself? And that shows resilience"* (T4, School A, p. 5) If I have to think in my class environment, a learner that is coping well, I would see a learner that is able to juggle all the challenges that they're faced with and all the expectations that are placed on them (T2, School B, p. 5) Able to work through tasks So what contributes to a learner coping well is having a support system, but before that acknowledging that there's an issue, I feel that if there's no acknowledgement of the issue that a child can't cope (T3, School A, p. 5) Support system if you know your answer might be wrong but you are still keen to raise your hand to answer it, you know that someone may not necessarily want you in their group but you go to them and you say "can I be in your group". You show up every single day, even if you know someone picked on you the day before or you had a bad day because you didn't get all your notes done or something like that, you still pitch up every single day, and you start your day with the best of intentions, you know, it's going to be a good day, better is going to happen, I'm going to get everything I need to get done (T4, School A, p. 7) Persistence, ability to continue They're aware of the disadvantage, and they're still like it's not going to hold them back or make them different from anyone else. Um, coping well, I think would be just getting your tasks done day to day, not looking at yourself as if something is different, not having the mindset of, okay, I am different, I struggle with this, I know I'm going to be behind but working at your own pace and doing better than yourself yesterday (T4, School A, p. 7-8) Able to work through tasks, positive self-esteem So not comparing to other people because that's an unattainable, impractical way to measure your success or your progress, but to look at yourself (T4, School A, p. 8) Willingness to achieve without comparison I skip lines in between the work to make it neater, or I'm going to use my finger to space out the words and then compare this week's work to last week's work, like oh, I improved. Okay, so I got better myself and then compare that to the next week. I think that would be a learner that I would identify as coping well because they're not looking at those around them (T4, School A, p. 8) Seeking to improve, persistence

	I think it would be, you know, if the child maybe is not able to understand something, then they would try and make an effort, like maybe ask the teacher (T5, School A, p. 6) Seeking to improve, persistence But I think resilience would be now the child who would actually go through that extra effort to try and get the work done on their own (T5, School A, p. 7) Able to work through tasks with minimal or no support I think support, the support that they get from those around them, you know, support from the parents, maybe support from friends. That would actually help, you know, people encourage them and motivating them, the people around them. That would probably have to, you know, make them more resilient (T5, School A, p. 7) Resourceful support system Sometimes having a lot of negative things happening to you and where you've had to, you have to cope with all that negativity on your own can also make you resilient. I think it just depends now on the individual, you know (T5, School A, p. 7) Possessing resilient traits So, a learner coping well, I mean, where I would say that a learner who is willing to put themselves in a normal schooling situation even though they know they struggle is already a learner who is resilient because they're putting themselves in a situation where they already at a disadvantage (T4, School A, p. 7) Willingness to move forward
Resilience through personality traits **Perseverance / determination**	where you have the kids that will keep on doing it, doing it, doing it until you get it right (TH1, School A, p. 4) The advantage with her is like she's got this determination to move forward, so you know she's not like giving up hope, so that sort of is a positive thing for her in progressing (P1, School A, p. 4) because she's got this determination to move forward, she's trying to cope and do whatever thing she can as best as possible (P1, School A, p. 4) she's determined to do it, so she will come to us and says no, I want to do my work but because she can't manage always on her own (P1, school A, p. 5) but she sort of doesn't give up, you know what I'm saying, she wants to do it unless it's totally difficult (P1, school A, p. 5) he sits at his desk, and he will work and work, even though he's zoning out, he'll push himself, and he will stay there, right, until like 8, 9 o'clock at night. From the time he goes home, maybe he'll just eat, and go to his desk, and sit and push and push and push, so even though it's difficult for him, he really strives, he really works hard, so for me, he's an A student (P2, School A, p. 4) Yes, I do think he's very resilient because he works harder than anyone I know, right, he puts in the effort, and he's very, he doesn't let anything make him sad or demotivate (P2, School A, p. 7) I see the resilience because he'll still come back and he'll relearn it again, and he'll carry on like that, although he struggles, he pushes forward (P2, School A, p. 7-8) So the learner is trying in the sense, the learner does the work, comes to school regularly (T2, School A, p. 4-5)

Creativity	it seems like she is more on a creative side (P1, school A, p. 4) But the one does exhibit the more artistic views does have that abilities there… Creativity, I think (T3, School A, p. 6) but like this learner draws well. So maybe graphic designing will be a field for the learner to pursue. And they can do well (T2, School A, p. 12) Like they might have strong communication skills (T4, School A, p. 6)
Support-seeking behaviour	Usually, she asks for help if she can't sort of maybe do a certain activity, she will ask you know, how to do it (P1, school A, p. 4) If there's something that needs to be clarified, the learner will ask (T2, School A, p. 2) you know, and there were times when she had some queries to just find out, look, she's not sure about this and that. And she has asked me (T5, School A, p. 10) When asked about resilience, teacher 2 mentioned that the learner has a good relationship with her, such that he is not afraid to ask and has a willingness to achieve (Fieldnotes, School A, p. 6)
Routine preference	Ja, basically like we must follow the routine, and she herself is a person that wants it in a certain way done, so if you change something, then she will say, "No, it needs to be done in that way" (P1, school A, p. 5) every day is the same thing when you go to school, come home, homework, you know, I am saying, so she usually follows that sort of routine to keep up, and she doesn't like sort of change, too much change sort of (P1, school A, p. 5) so he's got, like a balance like that and routines, like we all get together for supper (P2, School A, p. 9)
Positive outlook	So he saw the resilience of those learners, and he became much more confident in himself, and he started working harder (P2, School A, p. 2) and then I asked him, let's stop here, finish Grade 9 and then go into a Technikon or something like that, and he refused, he's like, no, I will finish matric…(laughing) Even if I have to repeat it, I will finish matric, and so that showed me his strength and his resilience, and I was very proud of him (P2, School A, p. 5) he wants to go to university, and he wants to study, um, art design, so he will need a matric pass to get into that (P2, School A, p. 11) the learner has, you know, dreams of doing well or doing certain things (T2, School A, p. 3) So maybe he is working towards being more resilient (T2, School A, p. 5)
Grit	I think he has accepted it, and it's time to work towards improving where he can (T2, School A, p. 3)

	when he came to the school in the beginning, he came last year, he was still doing really badly, and by the end of the year, he actually managed to do well, and this year he's doing even better, so I'm very proud of him, and he works very hard (P2, School A, p. 5) he put his mind to, I'm going to finish Matric, and he makes sure that every day he puts in the work, so I think he's very resilient, like a lot of children would lose hope or be lazy (P2, School A, p. 7) So the learner is keen to learn. Like, you know, it's not like now that the learner says, okay, I can't do it, and he's giving up. That's not the case. Like the learner wants to finish matric, inshallah (T2, School A, p. 5) A learner coping well is a child that has a positive self-image, that they believe in themselves, that despite the difficulties that they have, they still try their best, and they give their best (TH1, School A, p. 5) It's really kids that are trusting themselves and believing themselves that they are okay (TH1, School A, p. 5)
Focused mindset	but when it's exam time and stuff, he's just very focused, in his own way, you know (P2, School A, p. 7)
Altruistic	he goes for charity drives where they see the poverty in the area, and they try to help those people. Then they appreciate what they got, and they try to do better for themselves, so that also helps his resilience, and it makes him grateful, and it makes him to work harder (P2, School A, p. 11)
Self-acceptance	
Good temperament	I find that they're also very helpful, and they're sweet learners. Like they have that, a personality that's very attractive instead of being, you know, the ones that I have, they're not rebellious because they have issues, they just seem somewhat caring and loving children (T3, School A, p. 6)

School B

Subthemes	Quotes
Concept of resilience • Going against negative outcomes • Not succumbing to failure, moving forward • Adaptive help-seeking • Ability to bounce back and move forward • Adapt and move forward • Positive environment and support system • Possessing resilient traits, positive home environment • Positive influences • Positive outlook, adaptive help- seeking • Optimistic, support system	That you don't tell me what to do something, you are against it. Resilient, if you're resilient against something, you are not for something, you're against something, you try to escape not doing it (T1, School B, p. 2) Going against negative outcomes I think resilience is not succumbing to failure, and not allowing failure to define you, and not allowing your weaknesses to define you. So if you do struggle to write and you identify this, and one of your challenges in life that you don't just sit back and go oh well I can't (T2, School, B, p. 4) Not succumbing to failure, moving forward there are other ways that you can come up get around that and actually get the assistance that you need, so that the knowledge that you do have can be available to other people and see what you have inside of you. It's just carrying on even though things are difficult (T2, School, B, p. 4) Adaptive help-seeking I feel they are resilient when they don't understand what is expected of them. So we see it as resilience, but actually, they just don't know what to do, or they don't understand how to approach anything. I don't know if I answered your question. (T3, School B, p. 7) Not sure how to interpret this Yes, do not want to participate. Or they, hulle skop terug. To be honest ...(laughing), that's a difficult question, like the need that they don't want to participate because they know they're not able to. (T3, School B, p. 7) Not sure how to interpret this Um, so resilience is the ability to bounce back or to, um, move forward, if even after hardships or, um, yeah, anything difficult that you faced, um, and, and what I've learned is that you learn to be resilient by having hardships. So if there's no, if there isn't hardships present then, then you can't learn to be resilient, so, and then that's your ability to, um, shoo, I have learned about this, but I can't remember everything ...(laughing) (TH2, School B, p. 8) Ability to bounce back and move forward Your ability to make, to kind of, I'm not saying it in a nice academical language now, but to make a plan to move forward, yeah, to adapt or something like that (TH2, School B, p. 8) Adapt and move forward what contributes for them for coping well? I know the resilience studies say that it's not just personality, but it's environment, and it's, um, yeah, environment and people and other influences in your life (TH2, School B, p. 8) Positive environment and support system

Subthemes	Quotes
	But I do believe that you have people, that's my personal opinion, who is just wired differently to keep trying even after hard things happen to them. So for me, that has an influence on the personality, um, and then definitely the environment in terms of their upbringing, their parents, the way that the people around them, um, approach difficult situations and handle difficult things (TH2, School B, p. 9) Possessing resilient traits, positive home environment And then, um, the opportunity to see how different people bounce back from, yeah, from hardships, yeah, I would say that. For me, that's that that has an influence (TH2, School B, p. 9) Positive influences So someone who doesn't, for me it would be someone who doesn't, um, let the, the thing that they struggle with get them down and influence their whole, um, outlook on life. So, for instance, with the writing difficulty, knowing that they have a difficulty with that, but then also knowing that there are ways around that and that they can use whatever it is. Whether it's a computer or someone who writes for them or, um, and, and still tries to do things even though they have a disability (TH2, School B, p. 9) Positive outlook, adaptive help-seeking Um, I think someone who's generally just more, um, optimistic. For me, that does have a big influence and then if you are exposed to people in your life that tells you, okay, I know this is hard, this is not nice, what can we do, what can we, how can we approach it? What can we do about it? (TH2, School B, p. 10) Optimistic, support system
What constitutes a learner coping well • Able to adapt • Functional coping, able to complete tasks, manages emotions	They must learn to adapt, to cope with what they have and get the help they can to help them (T1, School B, p. 2) Able to adapt There are learners that do their homework on time, there are learners that finish in time in class, there are learners that do not have emotional meltdowns in class. Then you know that they are coping, that the challenges that they have might be enough to keep them growing but it's not overwhelming them (T2, School, B, p. 5) Functional coping, able to complete tasks, manages emotions there are other ways that you can come up get around that and actually get the assistance that you need so that the knowledge that you do have can be available to other people and see what you have inside of you. It's just carrying on even though things are difficult (T6, School, B, p. 4) Adaptive help-seeking

Subthemes	Quotes
Resilience through personality traits	
Perseverance/determination	The learner has to have a high self-esteem and willingness to progress, or a 'fighter' to progress (Fieldnotes, School B, p. 31) Uhh, so for me that would be personality characteristics, someone who's more determined, um, someone who is a problem solver will automatically, if they have the will to do something about it, um, be better because they can solve problems or they try to solve problems (TH2, School B, p. 10)
Support-seeking behaviour	she just carried on attending her extra classes, she's carried on working really hard at home, asking people to help her, and you can see her blossoming now, she really has overcome those challenges (T7, School B, p. 5)
Positive outlook	They try and carry on in their own way, in their own way (T6, School B, p. 2) they cope with it, they manage to cope with what they get (T6, School B, p. 2)
Grit	Concerning the personality traits of learners with writing difficulties, teacher 4 expressed that they are ''not shy and generally outspoken. Also, for example, the learner in my class, she is eager to do all her work, it just takes her a long time to do'' (Fieldnotes, School B, p. 21-22)
Good temperament	they don't have behavioural issues or stuff because they can't write (T6, School B, p. 2) I don't see them acting out because of it (T6, School B, p.2) So for me, a learner that has, you can see that in their demeanour and the attitude (T7, School B, p. 5)

Example of axial coding

THEME 3 - Resilience	SCHOOL A (Participants)	SCHOOL B (Participants)
Concept of resilience		
Ability to push through	• Teacher 3	—
Willingness to move forward	• Teacher 4	—
Not giving up, persevering through challenges	• Teacher 5	—
Coping with challenges	• Parent 1	—
Multifactorial	• Parent 1	—
Determined to move forward	• Parent 2	—
Multiple role players	• Parent 2	—
Parents integral role	• Parent 2	—
Persevering through difficulty and moving forward	• Teacher 1	—
Overcoming challenges	• Teacher 1	—
Self-expression, moving forward	• Teacher 1	—
Parents' role, multiple factors	• Teacher 1	—
Guidance from parents	• Teacher 1	—
Getting back up from difficulty	• Teacher 3	—
Withstanding difficulty	• Teacher 2	—
Trying after failure, not giving up	• Teacher 4	—
Moving against negative outcomes	• Teacher 4	—
Going against negative outcomes	—	• Teacher 1
Not succumbing to failure, moving forward	—	• Teacher 2
Adaptive help-seeking	—	• Teacher 2
Ability to bounce back and move forward	—	• Therapist 2
Adapt and move forward	—	• Therapist 2
Positive environment and support system	—	• Therapist 2
Possessing resilient traits, positive home environment	—	• Therapist 2
Positive influences	—	• Therapist 2
Positive outlook, adaptive help-seeking	—	• Therapist 2
Optimistic, support system	—	• Therapist 2
What constitutes a learner coping well		
Sustained engagement	• Teacher 3	-
Able to work through tasks	• Teacher 2	-
Support system	• Teacher 3	
Persistence, ability to continue	• Teacher 4	

THEME 3 - Resilience	SCHOOL A (Participants)	SCHOOL B (Participants)
Able to work through tasks, positive self- esteem	• Teacher 4	
Willingness to achieve without comparison	• Teacher 4	
Seeking to improve, persistence	• Teacher 4, Teacher 5	
Able to work through tasks with minimal or no support	• Teacher 5	
Resourceful support system	• Teacher 5	
Possessing resilient traits	• Teacher 5	
Able to adapt	-	• Teacher 1
Functional coping, able to complete tasks, manages emotions	-	• Teacher 2
Resilience through personality traits		
Perseverance/determination	• Therapist 1, Parent 1, Parent 2, Teacher 2	• Fieldnotes, Therapist 2
Creativity	• Parent 1, Teacher 2, Teacher 3, Teacher 4	-
Support-seeking behaviour	• Parent 1, Teacher 2, Teacher 5, Fieldnotes	• Teacher 2
Routine preference	• Parent 1, Parent 2	-
Resilient outlook	• Parent 2, Teacher 2,	• Teacher 1
Grit	• Parent 2, Teacher 2, Therapist 1	• Fieldnotes
Focused mindset	• Parent 2	-
Altruistic	• Parent 2	-
Self-acceptance	• Teacher 2	-
Good temperament	• Therapist 1, Teacher 3	• Teacher 1, Teacher 2

APPENDIX C: INTERNATIONAL POLICIES ON INCLUSION AND DISABILITIES

Country	Policy Framework/Guidelines	Key implementation features
Finland **Sources:** Sundqvist & Hannas (2021, p. 690); Wolff et al. (2021, p. 7-15); Ahtiainen et al. (2021, p. 8-9)	Basic Education Act 628 (1998)	• The Finnish inclusive policy is committed to providing education for all, including those with special educational needs, within ordinary school settings (tier 1) or special educational settings through a three-tiered framework of support. • The Finnish curriculum follows the Basic Education Act, which recognises inclusive education principles as part of the curriculum. • Learners requiring additional support are catered for in mainstream classrooms using flexible support approaches, including differentiation, part-time special needs education, co- teaching, and assistant services (tier 2), unless otherwise requiring placement in a special education environment (tier 3). • Placement of learners in special educational learning is based on thorough assessments conducted by educational professionals, guided by psychological, medical, or social reports. Parental involvement aligns with the inclusive education principles.
Canada **Sources:** Ontario Ministry of Education (2024); Sider et al. (2021, p. 234); Bunch (2015, p. 3)	Each province has its own policy according to the Education Act (e.g., Accessible Education for Students with Disabilities (2018). Each province has a policy based on the learner needs in that province. Accessible Canada Act (2019)	• Special education policy in Canada revolves around the full participation of all learners in mainstream school settings, to promote social acceptance within the educational environment, and address the diverse needs of all learners. • While each province holds its own policies, as per the legislation, all are centred around Universal Design for Learning principles (UDL) or multi-tiered support systems (MTSS) as an inclusive curriculum design. • Provisions within each province ensure the necessary support services and resources for learners with learning disabilities to succeed academically and socially. This is done through the school between parents, teachers, the principal and the school board. • Teachers receive training on support practices to effectively teach diverse learners (IEPs and transition plans are used). There is also collaboration among educators, parents, and specialists such as assistants, psychologists and speech therapists, and community agencies to ensure the success of a holistic support framework.

Country	Policy Framework/Guidelines	Key implementation features
United Kingdom **Source:** Department for Education (2024); Done (2020, p. 4); Tomlinson (2017, p. 64); Malet (2023, p. 6)	Children and Families Act (2014) The Equality Act (2010) 'Special Educational Needs and Disabilities' SEND Code of Practice (2015)	• UK policy on inclusion emphasises the importance of providing an equitable and accessible education for all individuals, regardless of their individual needs and backgrounds. • The Equality Act (2010) mandates that schools must not discriminate against learners with disabilities or special educational needs and aims to support inclusion within mainstream schools alongside their peers. • Frameworks such as the EHCP involve more comprehensive plans for learners requiring substantial support, outlining educational, health, and social care needs with a focus on creating inclusive environments that accommodate diverse learning needs and on facilitating collaboration among teachers, families, and communities to enhance educational experiences for all learners.
Australia **Sources:**	Disability Discrimination Act (1992)	• Support policies in Australia aim to ensure that learners with disabilities have access to educational opportunities and are not excluded.
Mavropoulou et al. (2023, p. 4); Iacono et al. (2019, p. 266)	Disability Standards for Education (2005) Higher Education Support Act (2003)	• Learners with learning disabilities are catered for in a variety of settings, which include special schools and mainstream schools that provide additional support as part of inclusive classroom practices. The Higher Education Act (2003) ensures that support, both academic and non-academic, is available and that students succeed in their learning journey. • The implementation of all policies and guidelines takes into consideration the roles of various stakeholders, including parents, teachers, and students, to create a comprehensive framework that supports all learners.
Ghana **Sources:** Asamoah et al. (2022, p. 4-5); Pather & Slee (2020, p. 20); Senadza et al. (2019, p. 7-9)	Rights of Persons with Disabilities Framework (2012) Inclusive Education Policy (2015) Persons with Disabilities Act (2006)	• Ghana's special education policy aims to provide equal learning opportunities for all learners and promote social acceptance. The educational needs of learners requiring special support are addressed within a general education framework. • The policies and guidelines target improving the living standards of learners with disabilities by ensuring their right to access equal services and benefits, e.g., libraries and equipment, thereby promoting their full participation in schools and society. • Educational responses to disability in Ghana also prioritise diagnostic and referral processes that categorise learners, rather than simply endorsing inclusive practices in a mainstream setting. • Although there is a policy shift towards transforming special schools into resource centres, many learners—particularly those with severe disabilities—remain in special educational school settings.

Country	Policy Framework/Guidelines	Key implementation features
Kenya **Sources:** **Ministry of** Education (2023); Inyega et al. (2021, p. 10); Kiru (2019, p. 184)	Special Needs Education Policy Framework (2009, 2012) Sector Policy and Implementation Guidelines for Learners and Trainees with Disabilities (2018)	• As per the Special Education Needs Policy Framework, learners are first required to undergo a functional assessment (i.e., screening) to determine an appropriate placement in school, whether in special educational schools, a special unit, mainstream school, or home-based learning programmes. • Depending on the placement category, learners with special support needs have access to the regular curriculum; however, it is necessary for teachers to make the necessary adjustments and adaptations to the learning content, teaching methods, learning strategies, resources, and assessment procedures. • The policy also emphasises inclusion to enable learners with learning disabilities to feel a sense of belonging in the school community and within society, irrespective of the type of disability.

APPENDIX D: SOUTH AFRICAN POLICY FRAMEWORKS AND GUIDELINES FOR INCLUSION AND DISABILITIES

1. The South African Schools Act (SASA), 1996 (Act No. 84 of 1996)
2. The National Commission on Special Educational Needs and Training (NSNET) and the Education Committee on Special Support Needs (NCESS) (1997) report
3. The White Paper on an Integrated National Disability Strategy (1997)
4. The White Paper 6: Building an Inclusive Education and Training System (2001)
5. Guidelines for Inclusive Learning Programmes (2005)
6. Guidelines for Full-Service and Inclusive Schools (2010)
7. The National policy pertaining to the programme and promotion requirements for the National Curriculum Statement Grades R-12 (2012)
8. Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres (2014)
9. The Policy on Screening, Identification, Assessment and Support (SIAS) Strategy (Department of Basic Education, 2014)

3.5.2.1 The South African Schools Act (SASA), 1996 (Act No. 84 of 1996)

The act sought to address many matters related to schools, but no specific guidelines were given to address how schools should support learners with special education needs, except that no child should be denied admission because of a disability. Furthermore, the Act addresses matters related to children within schools; there is no clarity on how to adapt learning for individuals with disabilities. It further allows the head of department to make decisions and to establish the learner's placement if the schools do not have the capacity to admit such learners. To support learners, then, heads of department are required to place them in schools with educators who recognise their learning needs. For this to be successful, schools require caregivers, accessible and adequate infrastructure and relevant resources. Tai et al. (2023, p. 489) suggest that assessments should not affect placement and should not be carried out without specialists in the field, as this could result in learners being placed in classrooms where they either struggle too much or are not challenged enough. Thus, Tai et al. (2023, p. 489) also recommend that assessments should be ongoing rather than conducted once to better understand a learner's abilities. While SASA supports assessing children who experience barriers to learning (i.e. writing difficulties), it also stresses that these assessments should not be used to exclude learners from the education system. Furthermore, parents espouse the right to decide on the final educational placement for their child (Kern, 2020, p. 260).

3.5.2.2 The National Commission on Special Educational Needs and Training (NSNET) and the Education Committee on Special Support Needs (NCESS) (1997) report

Subsequent to the development of the Constitution, efforts towards the above commissions began in 1995 following the appointment of the Minister of Education. In October 1996, the then Minister of Education commissioned the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee on Education Support Services (NCESS) to investigate and provide recommendations on all aspects of special needs education and support services in South Africa. The primary objective of this investigation was to enhance the education system to accommodate the diverse learning needs of all students (DoE, 1997, p. 2). The findings of these committees served a dual purpose: they identified key challenges within the education system and provided recommendations to the Department of Education for addressing them. Among the major issues highlighted were deficiencies in the provision and organisation of education, a rigid curriculum that failed to accommodate the diverse needs of learners—resulting in learning difficulties—unsafe and inaccessible school infrastructure, and insufficient investment in human resource development.

To address these challenges, the commissions proposed several recommendations (DoE, 1997, pp. 2). Firstly, they criticised the traditional view of “special needs” as an individual deficiency, arguing that this perspective shifts responsibility onto students rather than addressing broader systemic failures. Instead, they advocated for a more inclusive education system that adapts to learner diversity rather than expecting students to conform to an inflexible model. Additionally, they emphasised the importance of a community-based support approach that leverages local resources, moving away from the traditional reliance on specialists as the sole providers of educational support. These recommendations called for a fundamental shift in how special needs education is approached, urging a more responsive and inclusive system.

It is evident from these findings and recommendations that a paradigm shift was necessary to improve the education system in South Africa. Since the area of supporting the resilience of adolescent learners with writing difficulties (a barrier to learning) is within the context of this study, the White Paper on an Integrated Disability Strategy is briefly discussed.

3.5.2.3 The White Paper on an Integrated National Disability Strategy (1997)

To address the disparities in educational requirements between typically and atypically developing children in South African schools, the Integrated National Disability Strategy (DoE, 1997) was introduced. This strategy, amongst other matters, responded as a means of

advocacy to the slogan of disability groups, “Nothing about us without us”, and acknowledged the challenges in accurately documenting disability prevalence. Importantly, while individuals with disabilities were actively involved in shaping the strategy, the Constitution of South Africa (1996, Act No. 108 of 1996) provided legal protection for this vulnerable group, as the strategy aimed to monitor:

- The drafting of regulations and governing acts,
- The administration of these laws and policies,
- The misinterpretation or ignorance of legal provisions, and
- The ineffective management of legal objectives.

These focus areas, combined with research findings, informed the development of the Education White Paper 6 Policy, which established a framework for implementing **inclusive education**. This policy aims to ensure that children with disabilities have access to quality education, promoting equal opportunities for all within the school system.

3.5.2.4 The White Paper 6: Building an Inclusive Education and Training System (2001)

The Education White Paper 6 (WP6) provides a framework for inclusive education, ensuring that all learners receive appropriate support within schools, particularly those attending mainstream or full-service schools. It identifies two key approaches to addressing learning barriers, namely prevention and support. Prevention focuses on transforming educational institutions and curricula to provide equal learning opportunities for all students while reducing barriers to learning. Support emphasises the provision of Education Support Services (ESS) to assist schools, teachers, parents, and learners in overcoming barriers to learning (Rens & Louw, 2021, p. 1). These approaches help create a supportive and inclusive learning environment that accommodates diversity and promotes academic success irrespective of the type of school the learner attends.

To implement these strategies effectively, WP6 introduced a three-tier system of support, which includes: National and provincial departments, District-Based Support Teams (DBSTs), and Institution-Level Support Teams (ILSTs) (DoE, 2001). The DBST was guided by policy documents, first established in 2005, and by *The Conceptual and Operational Guidelines for the Implementation of Inclusive Education:* DBSTs (DoE, 2005a, p. 7), which provided structured guidance for professionals supporting educational institutions such as schools, colleges, early childhood and adult learning centres. Education specialists and professionals operating within district structures were given a practical guide along with strategies to help set up and enhance DBSTs. This document promoted a collaborative approach, encouraging various support providers to jointly plan and work together in addressing local challenges and needs in a coordinated, holistic manner (DoE, 2005a, p. 10). The ILST, established at the school level, worked closely with the DBST to identify and address learning barriers within

individual school contexts (DoE, 2005a, p. 34-37).

Further guidance for the DBSTs is outlined in *The Conceptual and Operational Guidelines for the Implementation of Inclusive Education: Special Schools as Resource Centres* (DoE, 2005b). This policy document highlighted that DBSTs should collaborate with special education schools as resource centres, ensuring that these institutions provide specialised support to both full-service and ordinary mainstream schools. Staff from resource centres and DBSTs were required to share their expertise, valuable information and technological skills to enhance learning support for all learners with barriers to learning (DoE, 2010, p. 43). By fostering coordination between these structures, the WP6 aims to build a strong support system that empowers children and adolescents alike to succeed academically in their respective educational settings.

Though the WP6 aims to have all learners attend full-service and ordinary mainstream schools, learners with special education needs may find it difficult to adjust in these learning environments and are then placed in special education schools. This transition may sometimes be difficult for both parents and learners and could present negative effects that hinder the learner's progress, such as lower self-esteem and self-efficacy. However, through professional assessment between the professionals and the school and with consideration and consultation with parents, the best placement may be determined for the learner (Rens & Louw, 2021, p. 2). Learners should not be placed by force in mainstream or special education institutions, and there are guidelines in respect of both.

3.5.2.5 Guidelines for Inclusive Learning Programmes (2005)

The *Guidelines for Inclusive Learning Programmes* (DoE, 2005b) served as another important policy resource, equipping teachers, administrators, and education personnel with practical strategies for managing diversity in the classroom. Its primary focus is on addressing the barriers that commonly hinder learning in South Africa. These included disability-related challenges, language and communication difficulties, limited parental involvement, socio-economic disadvantages, and negative attitudes—all of which significantly impact learners' ability to engage meaningfully with the curriculum (DoE, 2005b, p. 10). This policy framework promotes best practices in teaching and learning, supports the development of supportive school environments, and fosters collaboration among educators, parents, and the community, ultimately contributing to the realisation of an equitable and effective education system for South African school-going learners.

3.5.2.6 Guidelines for Full-Service and Inclusive Schools (2009)

Following the Guidelines for Inclusive Learning Programmes, in 2010, the Department of Education established the *Guidelines for Full-Service/Inclusive Schools*, a policy document designed to support schools in becoming fully inclusive environments (DoE, 2010, p. 2). This framework outlined specific criteria that schools were required to meet to be officially recognised as inclusive institutions. It also detailed practical steps for identifying and responding to the varied learning needs of all students (DoE, 2010, p. 2). A key emphasis of the document is the central role of support structures within schools, particularly the importance of site-based support through the ILST. The guidelines further elaborate on how support should be systematically organised and implemented via the ILST to ensure the effectiveness of inclusive education practices (DoE, 2010, p. 22). The significance lies in the ILST's role in promoting inclusive education practices that cater to all learners, including those with disabilities and other special educational needs. These guidelines aim to create environments that support the diverse educational requirements of learners, ensuring that every learner has access to quality education. By providing a structured approach to implementing inclusive practices, it may facilitate the integration of necessary resources, teacher training, and collaborative efforts among staff and the community, which could enhance educational outcomes and foster more resilient youth in society.

3.5.2.7 The National policy pertaining to the programme and promotion requirements for the National Curriculum Statement Grades R-12 (2012)

The Department of Education (2011) determines clear standards for how learners should progress from one grade to the next, outlines the requirements and allows concessions for learners with disabilities. The policy statement specifies that school attendance is compulsory for all learners up to nine years old and also determines the period during which learners are allowed to remain in each phase: up to three years in each phase, the foundation and intermediate phases.

However, these regulations have implications for learners with disabilities, such as those often experienced by children with learning disabilities. These learners may face multiple neuro-developmental delays and struggle with conditions like dyslexia, dysgraphia, and dyscalculia, making it difficult for them to keep up with the standard curriculum or progress at the same rate as their typical peers, without the required and relevant support. Although the policy supports inclusive support practices, its success largely depends on teachers being able to differentiate the curriculum and use alternative assessment strategies for learners based on their needs. As Hove and Phasha (2023, p. 2) point out, there is a need for a shift in how policies are applied, so that teachers are better equipped to support differently abled learners, fostering

the development of rich learning environments, filled with multiple learning opportunities, which enable all learners to participate in the classroom and within the school at large. Unfortunately, however, many teachers have not received suitable training to provide support through curriculum differentiation and alternative assessments for learners with learning disabilities specifically (Mpu & Adu, 2021, p. 231), which means that learners with learning disabilities will often struggle to learn and succeed in mainstream or full-service schools.

While the South African government has introduced inclusive education policies, there is little evidence that it is closely monitoring how well these policies are working or actively trying to solve the challenges schools face. Without better support for teachers and stronger follow-up from the government, it will be difficult to provide fair and effective education for learners with disabilities.

3.5.2.8 Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres (2014)

The guidelines to Ensure Quality Education for Special Schools and Special Resource Centres (2014) were developed alongside WP6, based on the premise of improving educational support for learners experiencing barriers to learning. With an understanding of the establishment of inclusion, the DoE (2014, p. 1) foresaw the need to strengthen the delivery of education in special schools and resource centres so that they may provide adequate and appropriate quality education for learners who require an intense level of support within these school contexts. The policy guidelines offer a clear structure for how inclusive education principles should be put into practice, focusing on meeting the diverse needs of all learners enrolled in these schools (DoE, 2005, p. 4). One of the more noteworthy points within these guidelines is the importance of accommodations and support strategies, which help ensure that learners with disabilities can access education on equal terms with their peers. It also stresses the need for curriculum differentiation, whereby teachers are required to adjust teaching methods and learning materials so that all learners with learning disabilities can experience learning as part of, and within the confines of, the national curriculum statement in ways that are best suited to their learning needs (DoE, 2005, p. 12).

In addition, the guidelines state that assessments should be adapted to fairly measure learners' progress, taking into account their specific needs, as all learners do not experience learning in the same way due to the severity of their learning difficulties (Mahlaule et al., 2024, p. 2). It also brings forth clarity on the roles of different professionals and support teams within schools, ensuring that support for learners is well coordinated and effective (DoE, 2014, p. 2). Even though the Government describes inclusive education in terms of barriers to learning in the Education White Paper 6 (DoE, 2001), these guidelines denote that inclusivity does not

strictly apply to ordinary mainstream and full-service schools. Inclusivity should be acknowledged and practised within special educational settings to create learning environments where learners with disabilities are not only supported in their academic pursuits but also feel included and valued. In doing so, the social experiences and skills of these learners are also harnessed. From a South African inclusive context, special schools and resource centres play a strong, supportive role in the wider education system (Kern, 2020, p. 257).

3.5.2.9 The Policy on Screening, Identification, Assessment and Support (SIAS) Strategy (Department of Basic Education, 2014)

In 2008, the Department of Education introduced the SIAS strategy as a key policy framework to address barriers to learning and development (DoE, 2008a, p. 6). This document outlines a systematic process to evaluate the level and type of support learners need within schools and classrooms. Its primary aim is to ensure that all learners, especially those facing learning barriers, receive appropriate support to enhance their participation and inclusion in the learning process (DoE, 2008a, p. 6).

The successful implementation of the SIAS strategy relies on the coordinated efforts of several stakeholders, including principals, teachers, SBST, and DBST. Teachers are tasked with identifying learners experiencing difficulties and reporting them to the SBST coordinator, who, in turn, communicates with the DBST coordinator. Depending on the identified needs, the DBST may either provide direct training for educators or facilitate access to specialised professional support for both learners and teachers. The strategy also promotes collaborative engagement among learners, parents, and educators to ensure a comprehensive approach to support services (Department of Education, 2001).

The updated SIAS strategy (DBE, 2014) is grounded in the use of multidisciplinary teams who conduct assessments and determine the appropriate support required. At the school level, the SBST should be composed of a coordinator, educators, and the principal, who serves as the overall manager of the process. At the district level, the DBST must include a range of interdisciplinary professionals to address learners' educational, emotional, and health-related needs. Support services for learners can include consultations with the school psychologist or counsellor, and occupational therapists and speech therapists, as well as concessions and accommodations (DoE, 2016, p. 17). Notably, the revised strategy also acknowledges the community as a valuable source of support.

Moreover, the SIAS framework distinguishes between special schools and full-service schools, aiming to place or support learners in their current learning environments where adequate support systems are in place. The responsibility for placement lies with the head of the

provincial department, and placement decisions are informed by the availability of necessary resources within the school environment and community. However, this may be a significant challenge in rural areas, where limited access to educational and support resources often hampers the progress and development of learners with disabilities, placing them at a disadvantage compared to their typically developing peers.

It is evident from the above that South Africa has made considerable strides in formulating policies, legislative frameworks, and strategic guidelines to advance inclusive education and support for learners with barriers to learning. However, a critical question arises: To what extent are effective systems and support mechanisms in place to enable educators and other stakeholders to implement these policies meaningfully and ensure that the curriculum is accessible to all learners, particularly those experiencing learning disabilities, including those with more specific challenges, such as writing difficulties?

APPENDIX E: UNISA ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 12 July 2024

Ref: **2024/07/12/00000099/02/RB**

Name: **Mr Ruzaika Shaik Mohammed**

Student No.: **67140297**

Decision: Ethics Approval form

Dear **Mr Ruzaika Shaik Mohammed**

Researcher(s): Name: Mr Ruzaika Shaik Mohammed
E-mail address: 67140297@mylife.unisa.ac.za
Telephone: 0722052947
Supervisor(s): Name: Dr CL Weber
E-mail address: webercl1@unisa.ac.za
Telephone: 0124294588

Title of research: The role of the school ecology in facilitating resilience in adolescents with writing difficulties.

Qualification: PhD (Psychology of Education)

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above-mentioned research. Ethics approval is granted for the period **2024/07/12** to **2029/07/12**.

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*The **write risk level** application was reviewed by the Ethics Review Committee on **12 July 2024** in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

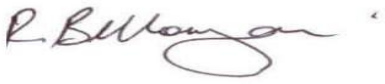
The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regard to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's Act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future, on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2029/07/12.** Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2024/07/12/0000099/02/RB** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,



Acting Head: CEDU Research
monyarb@unisa.ac.za



Prof Mpine Makoe
Executive Dean: CEDU
gakisme@unisa.ac.za

Approved - decision template – updated 16 Feb 2017

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APPENDIX F: GAUTENG DEPARTMENT OF EDUCATION RESEARCH APPROVAL LETTER

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	18 June 2024
Validity of Research Approval:	08 February 2024– 30 September 2024 2024/157
Name of Researcher:	Shaik Mahomed R
Address of Researcher:	514 Bengal Street ,Laudium
	Pretoria
Telephone Number:	072 205 2947
Email address:	67140297@mylife.unisa.ac.za
Research Topic:	The Role of the School Ecology in Facilitating Resilience in Adolescents with Writing Difficulties
Name of University:	UNISA
Type of qualification	PhD
Number and type of schools:	2 Secondary Schools
District/s/HO	Tshwane East

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

28/06/2024

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

1. *Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*
3. ***Because of the relaxation of COVID 19 regulations researchers can collect data online, telephonically, physically access schools or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate.***
4. ***The Researchers are advised to wear a mask at all times, Social distance at all times, Provide a vaccination certificate or negative COVID-19 test, not older than 72 hours, and Sanitise frequently.***
5. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*
6. *A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
7. *The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
8. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
9. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
10. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
11. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
12. *The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
13. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
14. *On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.*
15. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.*
16. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

.....

Dr. Gumani Mukatuni
DCES: Education Research and Knowledge Management

DATE: 28/06/2024

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX G: REQUEST TO SCHOOL PRINCIPAL FOR PERMISSION TO CONDUCT RESEARCH

Dear Principal

I, Ruzaika Shaik Mahomed, am doing research under the supervision of Dr Chantel Weber, a senior lecturer in the Department of Psychology of Education, towards a Doctoral degree (PhD) at the University of South Africa. We are inviting you to participate in a study entitled **'The role of the school ecology in facilitating resilience in adolescents with writing difficulties'**.

The aim of the study is to explore how the school ecology, encompassing school personnel (teachers, administrators, support staff), students, parents/caregivers, community resources, policies, and practices, etc., promotes resilience among adolescent learners with writing difficulties through structured support. Your school has been selected as a potential research site due to its provision of educational services to a diverse student body, including individuals from varied cultural backgrounds facing distinct challenges, such as those associated with specific learning disabilities.

Research indicates that learners with learning disabilities, lacking adequate support, face significant challenges in formal schooling, potentially leading to enduring consequences later in life. Thus, the reason behind this study is to explore how adolescent learners with learning disabilities who struggle significantly with writing difficulties can access contextually and culturally appropriate support to foster resilience. Resilience, in essence, can be simply understood as the ability to overcome difficulties and attain healthy development despite significantly adverse conditions or events that predict negative outcomes, and being able to make a positive adjustment, which is necessary to attain any goal or learning task. Hence, to accomplish this study, it necessitates conducting interviews with teachers, allied professionals (e.g., school psychologists, therapists), as well as parents/caregivers of the respective learners. Through these interactions, a deeper comprehension can be gained regarding how support mechanisms can promote resilience, enabling learners to reach their full potential and thrive academically.

In addition, apart from conducting the interviews, I would also like to request that I be allowed to:

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- take photographs of school structures, learning materials, lesson activities, and other potential resources where necessary.
- review lesson plans to note how lessons are developed and applied in class; and
- use the data confidentially and anonymously for further research purposes, as the data sets are the intellectual property of the University of South Africa. The confidentiality and privacy applicable to this study will be binding on future research studies.

The potential benefits of the study may include uncovering effective strategies and support systems within school environments that promote resilience among adolescents with writing difficulties. This insight can inform the development of tailored interventions and support services for learners with writing difficulties in various educational settings. By examining the role of the school ecology in facilitating resilience, the study may contribute to a deeper understanding of writing difficulties and their impact on adolescent learners. This understanding may assist teachers and school personnel to better address the needs of individual students with writing difficulties and incorporate more sustained, inclusive practices. In addition, understanding how the school ecology contributes to resilience may empower adolescents with writing difficulties by highlighting their strengths, resources, and support networks within the school community. This awareness can promote self-efficacy, confidence, and a sense of belonging among learners with learning disabilities who struggle with significant writing difficulties.

The findings from the study may also further promote inclusive practices within schools, fostering environments that accommodate the diverse needs of learners, including those with writing difficulties. This can contribute to a more supportive and equitable educational experience for all learners. The study may also offer valuable insights into effective strategies for supporting learners with writing difficulties, which can, in turn, inform professional development initiatives and training programs aimed at enhancing teachers' capacity to meet the needs of diverse learners.

Participants face minimal foreseeable risk in this study. However, in some instances during interviews, participants may exhibit emotional responses. This risk may arise from specific questions or topics discussed, leading to feelings of embarrassment or anxiety if a participant perceives difficulty in answering specific questions.



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Please be assured of the following:

1. The name of the school and the identities of the participants will not be disclosed. Pseudonyms will be used for the research site (school) and the participants in all reports.
2. All recordings, transcripts, interview notes and activity booklets will be stored on a password-protected computer and treated confidentially. Only the researcher and the supervisor will have access to the data gathered.
3. The data generated will only be used for academic purposes.
4. Participation is entirely voluntary, and the participants will have the right to withdraw at any time and without any prejudice.
5. No participant will be exposed to any acts of deception or risk of any kind.

Identified participants may choose whether they would like to participate or not. If they do wish to participate, signing a letter of informed consent will mean that he/she acknowledges the research topic and will contribute knowledge to it.

There will be no reimbursement or any incentives for participation in the research.

The feedback procedure will entail providing a summary of the key findings, and recommendations will be provided and discussed with the teachers and parents/legal guardians who participated in the research study. Arrangements to have an informative discussion with the participants of the study will be made, if required, with the school. A copy of the thesis can also be made available to participating schools on request.

Yours sincerely



Ruzaika Shaik Mahomed

Researcher

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APPENDIX H: CONSENT FORM (TEACHER)

UNISA university of south africa

PARTICIPANTS INFORMATION AND INFORMED CONSENT DOCUMENT

Date: 15/08/2024

Title: The role of the school ecology in facilitating resilience in adolescents with writing difficulties

DEAR PROSPECTIVE PARTICIPANT

My name is Ruzaika Shaik Mahomed, and I am doing research under the supervision of Dr Chantel Weber, a senior lecturer in the Department of Psychology of Education, towards a doctoral degree (PhD) at the University of South Africa. We are inviting you to participate in a study entitled **'The role of the school ecology in facilitating resilience in adolescents with writing difficulties'**.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could potentially uncover effective strategies and support systems within school environments that promote resilience among adolescents with writing difficulties. This insight can inform the development of tailored interventions and support services for learners with writing difficulties in various educational settings. By examining the role of the school ecology in facilitating resilience, the study may contribute to a deeper understanding of writing difficulties and its impact on adolescent learners. This understanding may assist teachers and school personnel to better address the needs of individual students with writing difficulties and incorporate more sustained, inclusive practices.

In addition, understanding how the school ecology contributes to resilience may empower adolescents with writing difficulties by highlighting their strengths, resources, and support networks within the school community. This awareness can promote self- efficacy, confidence, and a sense of belonging among learners with writing difficulties. The findings from the study may also further promote inclusive practices within schools, fostering environments that accommodate the diverse needs of learners, including those with writing difficulties. This can contribute to a more supportive and equitable educational experience for all learners.

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Furthermore, the study may also offer valuable insights into effective strategies for supporting learners with writing difficulties, which can, in turn, inform professional development initiatives and training programs aimed at enhancing teachers' capacity to meet the needs of diverse learners. While you may not benefit directly from the study, the above insights may help inform the Department of Basic Education's existing inclusive policies.

WHY AM I BEING INVITED TO PARTICIPATE?

As the educator of valued learners with a learning disability, I extend an invitation for your participation in this study. Your selection comes with the esteemed recommendation of the school's principal, who has identified you as a suitable participant for this research endeavour. Approximately 12-16 participants are sought in total, including the parent/legal guardians of a learner with writing difficulties, teachers (form teacher as well as subject teachers), and other school support staff such as the occupational therapist/speech therapist/school counsellor.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves conducting semi-structured interviews with all participants and capturing photographs of the school environment, teaching and learning materials, such as lesson plans, activities, students' work, resource books, and other relevant resources. Additionally, I will review lesson plans to gain a clearer understanding of their development and implementation in the classroom. This examination of resources will assist me in generating my own research field notes, which will assist me in capturing deeper insights into the research phenomenon. Should you agree to participate in the study, the interviews will be scheduled at a time convenient for all parties and are anticipated to last no longer than one hour each. All interviews will be recorded using a device with audio-recording features. Photographs of resources for review will also be taken during the scheduled school visits.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary, and you are under no obligation to consent to participation. Should you decide to take part in the study, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

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ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There is no foreseeable risk in participation, as you will only be requested to share your expert knowledge on the topic. The interview will also be conducted at a place that is suitable for you, presumably the school.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research. Additionally, your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym, and you will be referred to in this way in the data, any publications, or other research reporting methods, such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The data generated from this study (i.e., your answers) may be utilised for various purposes, including the preparation of research reports, journal articles, and conference proceedings. In this regard, your privacy will be protected, and you will not be identifiable in any such report.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the researcher's home office for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. If necessary, hard copies of your answers will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There will be no reimbursement or any incentives for participation in the research.

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HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Education, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact the researcher, Ruzaika Shaik Mahomed, on 0722052947 or email 67140297@mylife.unisa.ac.za. The findings are accessible for one month.

Should you have concerns about the way in which the research has been conducted, you may contact Dr Chantel Weber on (012) 429-4588 or email webercl1@unisa.ac.za.

Thank you for taking the time to read this information sheet and for participating in this study.



Ruzaika Shaik Mahomed

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CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, _____(participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the semi-structured interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)

_____

Participant Signature Date

Researcher's Name & Surname (please print)

_____

Researcher's signature Date

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APPENDIX I: CONSENT FORM (SCHOOL-BASED PROFESSIONAL)

PARTICIPANTS INFORMATION AND INFORMED CONSENT DOCUMENT

Date: 15/07/2024

Title: The role of the school ecology in facilitating resilience in adolescents with writing difficulties

DEAR PROSPECTIVE PARTICIPANT

My name is Ruzaika Shaik Mahomed, and I am doing research under the supervision of Dr Chantel Weber, a senior lecturer in the Department of Psychology of Education, towards a doctoral degree (PhD) at the University of South Africa. We are inviting you to participate in a study entitled **'The role of the school ecology in facilitating resilience in adolescents with writing difficulties'**.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could potentially uncover effective strategies and support systems within school environments that promote resilience among adolescents with writing difficulties. This insight can inform the development of tailored interventions and support services for learners with writing difficulties in various educational settings. By examining the role of the school ecology in facilitating resilience, the study may contribute to a deeper understanding of writing difficulties and their impact on adolescent learners. This understanding may assist teachers and school personnel to better address the needs of individual students with writing difficulties and incorporate more sustained, inclusive practices.

In addition, understanding how the school ecology contributes to resilience may empower adolescents with writing difficulties by highlighting their strengths, resources, and support networks within the school community. This awareness can promote self- efficacy, confidence, and a sense of belonging among learners with writing difficulties. The findings from the study may also further promote inclusive practices within schools, fostering environments that accommodate the diverse needs of learners, including those with writing difficulties. This can contribute to a more supportive and equitable educational experience for all learners.

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Furthermore, the study may also offer valuable insights on effective strategies for supporting learners with writing difficulties, which can, in turn, inform professional development initiatives and training programs aimed at enhancing teachers' capacity to meet the needs of diverse learners. While you may not benefit directly from the study, the above insights may help inform the Department of Basic Education's existing inclusive policies.

WHY AM I BEING INVITED TO PARTICIPATE?

As the educator of valued learners with a learning disability, I extend an invitation for your participation in this study. Your selection comes with the esteemed recommendation of the school's principal, who has identified you as a suitable participant for this research endeavour. Approximately 12-16 participants are sought in total, including the parent/legal guardians of a learner with writing difficulties, teachers (form teacher as well as subject teachers), and other school support staff such as the occupational therapist/speech therapist/school counsellor.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves conducting semi-structured interviews with all participants and capturing photographs of the school environment, teaching and learning materials, such as lesson plans, activities, students' work, resource books, and other relevant resources. Additionally, I will review lesson plans to gain a clearer understanding of their development and implementation in the classroom. This examination of resources will assist me in generating my own research field notes, which will assist me in capturing deeper insights into the research phenomenon. Should you agree to participate in the study, the interviews will be scheduled at a time convenient for all parties and are anticipated to last no longer than one hour each. All interviews will be recorded using a device with audio-recording features. Photographs of resources for review will also be taken during the scheduled school visits.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary, and you are under no obligation to consent to participation. Should you decide to take part in the study, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

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ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There is no foreseeable risk in participation, as you will only be requested to share your expert knowledge on the topic. The interview will also be conducted at a place that is suitable for you, presumably the school.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research. Additionally, your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym, and you will be referred to in this way in the data, any publications, or other research reporting methods, such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The data generated from this study (i.e., your answers) may be utilised for various purposes, including the preparation of research reports, journal articles, and conference proceedings. In this regard, your privacy will be protected, and you will not be identifiable in any such report.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the researcher's home office for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. If necessary, hard copies of your answers will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer/laptop device used.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There will be no reimbursement or any incentives for participation in the research.

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HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Education, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact the researcher, Ruzaika Shaik Mahomed, on 0722052947 or email 67140297@mylife.unisa.ac.za. The findings are accessible for one month.

Should you have concerns about the way in which the research has been conducted, you may contact Dr Chantel Weber on (012) 429-4588 or email webercl1@unisa.ac.za.

Thank you for taking the time to read this information sheet and for participating in this study.



Ruzaika Shaik Mahomed

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CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, _____(participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the semi-structured interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)

_____

Participant Signature Date

Researcher's Name & Surname (please print)

_____

Researcher's signature Date

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APPENDIX J: CONSENT FORM (PARENTS)

PARTICIPANTS INFORMATION AND INFORMED CONSENT DOCUMENT

Date: 15/07/2024

Title: The role of the school ecology in facilitating resilience in adolescents with writing difficulties

DEAR PROSPECTIVE PARTICIPANT

My name is Ruzaika Shaik Mahomed, and I am doing research under the supervision of Dr Chantel Weber, a senior lecturer in the Department of Psychology of Education, towards a doctoral degree (PhD) at the University of South Africa. We are inviting you to participate in a study entitled **'The role of the school ecology in facilitating resilience in adolescents with writing difficulties'**.

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In addition, understanding how the school ecology contributes to resilience may empower adolescents with writing difficulties by highlighting their strengths, resources, and support networks within the school community. This awareness can promote self- efficacy, confidence, and a sense of belonging among learners with writing difficulties. The findings from the study may also further promote inclusive practices within schools, fostering environments that accommodate the diverse needs of learners, including those with writing difficulties. This can contribute to a more supportive and equitable educational experience for all learners.

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CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

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HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the researcher's home office for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. If necessary, hard copies of your answers will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer/laptop device.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There will be no reimbursement or any incentives for participation in the research.



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HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Education, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact the researcher, Ruzaika Shaik Mahomed, on 0722052947 or email 67140297@mylife.unisa.ac.za.

Should you have concerns about the way in which the research has been conducted, you may contact Dr Chantel Weber on (012) 429-4855 or email webercl1@unisa.ac.za.

Thank you for taking the time to read this information sheet and for participating in this study.



Ruzaika Shaik Mahomed

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CONSENT/ASSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I,_____(participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the semi-structured interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)

_____

Participant Signature Date

Researcher's Name & Surname (please print)

_____

Researcher's signature Date

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APPENDIX K: RESEARCHER FIELD NOTES: GUIDELINE QUESTIONS

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SECTION A: LEARNER PROFILE

1. What is the nature of the learners' writing difficulties?
2. When were challenges first identified? (Has it been long identified or caused by trauma more recently?)
3. How do writing difficulties manifest in the classroom situation, and how does it influence the learners' learning ability?
4. To what extent is the learner's emotional well-being and self-concept affected?
5. How is the learner's relationship with their teacher and peers affected?
6. Do the learners display any resilient traits? (What are these?)

SECTION B: SUPPORT

1. How does the manifestation of learners' difficulties influence the learning process in the class as a whole?
2. How does the teacher handle the situation, and how does he/she support this specific learner in the classroom?
3. Does the learner receive any other professional assistance? E.g., occupational therapy, physio, educational psychology, remedial teaching etc.?
4. How is the classroom organised (arrangement of tables and chairs, is the classroom print-rich, class timetable displayed on the wall?)
5. What type of support materials are available in the classroom?

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6. How does the teacher use available resources?
7. Which resources do learners often make most use of?
8. How do the materials support learning of the subject/s?
9. What teaching and learning techniques/accommodations does the teacher utilise to foster resilience?
10. How do learners engage in the lesson? (speaking, listening, writing, reading)
11. How do learners respond to the strategies and techniques used to support learning?
12. What challenges does the teacher face in accommodating diverse learners?
13. Are the parents involved in the learning process of the learner?
14. What is known about the learner's home environment?
15. Is the support the learner receives sufficient for him/her to reach their full potential?
16. How do learners receive maximum support from the school?



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APPENDIX L: LANGUAGE EDITING CERTIFICATE

Le Roux Academic Consulting
Editing & Proofreading Services

Dr Suzaan le Roux
Artillery Road
Door De Kraal
Bellville
7530
proofreading@mweb.co.za
+27 (0)82 3210 484

11 May 2026

To whom it may concern

DECLARATION OF LANGUAGE EDITING: RUZAIKA SHAIK MAHOMED (67140297)

This letter confirms that I have proofread/edited the doctoral dissertation of Mr Ruzaika Shaik Mahomed titled "The role of the school ecology in facilitating resilience in adolescents with writing difficulties".

The editing service focused on improving the accuracy of language, overall readability, structure, and style, as well as checking spelling, grammar, and punctuation.

The editing service excluded re-writing any part of the dissertation or re-editing after editor comments were addressed.

Yours sincerely

Dr mult Suzaan le Roux

Contributing towards your success

Moneyline 1838 CC, Reg. No. 1999/056460/23, trading as *Le Roux Academic Consulting*
Members: S le Roux, PD le Roux