EXPLORATION OF LEARNER, PARENT, AND EDUCATOR EXPERIENCES OF CHRONIC DERMATOLOGICAL DISORDERS AS BARRIER TO LEARNING

by

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submitted in accordance with the requirements

for the degree of

MASTER OF EDUCATION

in the subject

PSYCHOLOGY OF EDUCATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR AM MOLL

30 JANUARY 2021

ACKNOWLEDGEMENTS

Jeremiah 29:11

“‘For I know the plans I have for you,’ says the Lord, ‘they are plans for good and not for disaster, to give you a future and a hope.’”

Glory to God, who has destined for me to do this course long before I was born and sent destiny helpers to help me step into and achieve it.

Firstly, I would like to thank my husband Jonathan for supporting me during the long hours of research. I appreciate your patience and encouragement.

I would also like to thank the learners, parents, and teachers who participated in the research.

I would also like to thank Dr Douglas, Mr Moses, and Ms van Heerden who were always available when I needed help.

The patience and help that I received from my supervisor, Dr Moll, is invaluable.

Chané Swarts who edited my work, has also been of great help to me.

To all my colleagues and friends that advised, encouraged, and supported me during the times that I felt that this course was too difficult, I appreciate you.

Additionally, by studying at this age, I hope to encourage my children, Waldimar and Kesia, that it is never too late to accomplish your dreams.

DECLARATION

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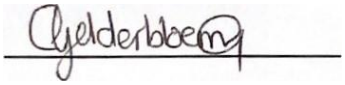
Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.



31 January 2021

SIGNATURE DATE

SUMMARY

The researcher observed that her son experienced his dermatological disorder as a barrier to learning. This personal experience made her wonder whether this might apply in the case of other learners too, and from this the aim of the research, namely to discover the extent to which dermatological disorders influence learning, was born.

A qualitative case study involving interviews and questionnaires to explore the views of learners, parents, and teachers regarding chronic dermatological disorders was used. The findings indicated that while learning is indeed influenced by chronic dermatological disorders, parents and teachers are supportive of learners with these disorders.

The following recommendations were made to overcome the learning barriers caused by chronic dermatological disorders: the forming of support groups, the use of social media and technology, inclusive education, the training of teachers in inclusive education, the implementation of educational policies relating to the health of learners, and collaboration between parents and teachers. Patience, endurance, consistent treatment, and understanding the problem are key survival techniques for learners with chronic dermatological disorders.

VERKENNING VAN LEERDERS, OUERS EN OPVOEDERS SE ERVARINGS VAN CHRONIESE DERMATOLOGIESE VERSTEURINGS AS LEERSTRUIKELBLOK

OPSOMMING

Die navorser het waargeneem dat haar seun sy dermatologiese versteuring as ’n leerstruikelblok ervaar het. Hierdie persoonlike ervaring het haar laat wonder of dit ook op ander leerders van toepassing kon wees, en daaruit het die doel van die navorsing ontstaan, naamlik om die mate te bepaal waarin dermatologiese versteurings leer beïnvloed.

’n Kwalitatiewe gevallestudie, wat onderhoude en vraelyste behels het om die menings van leerders, ouers en onderwysers oor chroniese dermatologiese versteurings te verken, is gebruik. Die bevindings het daarop gedui dat, hoewel leer inderdaad deur chroniese dermatologiese versteurings beïnvloed word, ouers en onderwysers leerders met hierdie versteurings ondersteun.

Die volgende aanbevelings is gemaak om die leerstruikelblokke wat deur chroniese dermatologiese versteurings veroorsaak word, te bowe te kom: die vestiging van steungroepe, die gebruik van sosiale media en tegnologie, inklusiewe onderwys, die opleiding van onderwys in inklusiewe onderwys, die inwerkingstelling van opvoedkundige beleide rakende die gesondheid van leerders, en samewerking tussen ouers en onderwysers. Geduld, volharding, konsekwente hantering, en begrip vir die probleem is belangrike oorlewingstegnieke vir leerders met chroniese dermatologiese versteurings.

UPHONONONGO LWAMAVA OMFUNDI, UMZALI KUNYE NOTITSHALA KWIZIPHAZAMISI EZINGAPHELIYO ZOLUSU NEZIFO ZALO (CHRONIC DERMATOLOGICAL DISORDERS) NJENGEZITHINTELI EKUFUNDENI

ISISHWANKATHELO

Umphandi ufumanise ukuba isithinteli esiphazamisa unyana wakhe solusu nezifo zalo sisithinteli ekufundeni kwakhe. La mava angawakhe amenze wazibuza ukuba ingaba oku kuyenzeka na nakwabanye abafundi, kwaze ukususela koku, injongo yophando ivele ekufumaniseni ubungakanani bempembelelo yezi ziphazamisi zolusu nezifo zalo ekufundeni.

Kusetyenziswe ufundo-nzulu olwaziwa njenge-Qualitative case study oluquka udliwano-ndlebe kunye neencwadana zemibuzo ekuphononongeni iimbono zabafundi, abazali kunye nootitshala malunga neziphazamisi ezingapheliyo zolusu nezifo zalo. Okufunyenweyo kubonakalise ukuba nangona enyanisweni, ukufunda kunempembelelo kwiziphazamisi ezingapheliyo zolusu nezifo zalo, abazali nootitshala baya baxhasa abafundi abanazo ezi ziphazamisi.

Ezi zindululo zilandelayo zenziwe ekoyiseni izithenteli zokufunda ezibangela iziphazamisi ezingapheliyo zolusu nezifo zalo: ukusekwa kwamaqela enkxaso, ukusetyenziswa kwamajelo oqhagamshelwano nge-intanethi nobuchwepheshe, imfundo equkwayo, ukuzalisekiswa kwemigaqo-nkqubo yemfundo enxulumene nempilo yabafundi kwakunye nentsebenziswano phakathi kwabazali nootitshala. Umonde, ukunyamezela, unyango olungaguqukiyo kunye nokuqonda ingxaki bobona buchule obuphambili empilweni yabafundi abaneziphazamisi ezingapheliyo zolusu nezifo zalo.

KEY TERMS

Chronic illness

Dermatological disorder

Inclusive education

Barrier to learning

Exploration

Disabilities

Full-service schools

Educational Policies

Teacher training

Collaboration

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CHAPTER 1

MOTIVATION, BACKGROUND AND AIM OF THE STUDY

1.1 INTRODUCTION

The expression “beauty is in the eye of the beholder” implies that beauty is subjective. Learners with scars from chronic skin diseases might want to hide because they do not feel beautiful. This is as a result of a low self-esteem (Ngaage & Agius, 2018:634). Beauty also refers to the character of a person (Rosida & Saputri, 2019:396). A positive self-image can therefore be created through emphasis on beauty from within.

Regardless, personal appearance is important to learners. The application of make-up as part of beauty treatments and to cover scars from chronic skin conditions, has become such a norm in schools because the make-up enhances the learners’ confidence. A learner without make-up might feel uncomfortable and unable to focus in class (Dong, 2017:1). Some learners allow their uncovered scars to define their value (Ngaage & Agius, 2018:635). Exposure to social media exacerbated the phenomenon (Abi-Jaoude, Naylor & Pignatiello, 2020:137).

Some people are embarrassed because their chronic skin diseases are outwardly visible (Institute for Quality and Efficiency in Health Care, 2013:1). The embarrassment can shift learners’ focus on outward appearances, whereas their main focus should be on learning. This lack of focus on learning could lead to the deterioration of class discipline.

The primary motivation behind this study was personal experience. The researcher’s son, 16 years of age, has been suffering from eczema since the age of three. He is allergic to grass, sand, seafood, gluten, and dust mites. However, he plays rugby and is thus exposed to sand and grass daily. Even his favourite food, pizza, is detrimental to his health. Additionally, the consequences of eczema restrict his learning. When suffering an allergic attack, he does not sleep well and tires easily. This, and self-torment regarding his appearance, leads to absenteeism. These personal experiences led the researcher to wonder if other learners also experience barriers to learning because of chronic dermatological disorders.

1.2 BACKGROUND TO THE STUDY

Before 2001 there were special schools for learners with disabilities or special health conditions in South Africa (Department of Education [DoE], 2001:3). However, most of these special needs schools were reserved for whites, while most disabled learners from other races had to stay at home. These special needs schools for white learners were well-resourced whereas the schools for other races were under-resourced (DoE, 2001:9).

To redress these inequalities and ensure that special needs education is non-racial, the government used a White Paper for Special Needs Education (DoE, 2001:4). In this White Paper, the Department of Education decided to close some of the special needs schools (also called resource centres) and only accommodate learners with severe disabilities. Those without severe disabilities had to attend mainstream or full-service schools (DoE, 2001:18-19). While learners with dermatological disorders are not necessarily disabled, they do have special health conditions. Regardless, they are among those who attend mainstream schools.

Moodley (2002:7) states that effective learning is directly related to and dependant on the social and emotional well-being of the learner. However, learners with chronic dermatological disorders' lack of focus on learning prevents effective learning. Therefor emotional and learning support is needed. One of the ways that the needs of learners with other disabilities and chronic health issues are addressed is through the use of inclusive education.

Inclusive education means that learners are included in the school despite their limitations. It aims to promote citizenship and the common values of human rights, freedom, tolerance, and non-discrimination (DoE, 2017:7). Moreover, Anderson and Boyle (2017:1) define inclusive education as an issue of social justice, meaning that it is every child's right to be included at school. However, because dermatological disorders are not formally recognised as a learning barrier at the school where the researcher teaches, these learners are excluded. They are excluded based on the absence of special arrangements for their skin conditions, i.e., there is no plan to accommodate these learners. Therefore, two of the aims of this research study are to discover how learners

with chronic dermatological disorders experience school and how they are accommodated in class.

“Social-phobia is the third most common anxiety disorder among children and is particularly common among students with social deficits. These children have an intense fear of being embarrassed or humiliated” (Lavoie, 2005:31). To address the freedom, tolerance, and social phobia of learners with dermatological disorders, learners must be allowed to express themselves in multiple ways and be motivated and included academically and socially.

The above is encompassed in the ecology of inclusive education as defined by Bronfenbrenner (Geldenhuys & Wevers, 2013:3). According to Bronfenbrenner, as quoted by Anderson and Boyle (2017:6), each learner is supposed to participate, be valued, and achieve in their school. Bronfenbrenner also states that teaching does not just take place in an educational system but in four different systems: the micro- meso-, exo-, and macrosystem.

Geldenhuys and Wevers (2013:6) state that the microsystem level includes three microsystems where the learner that experience barriers to learning is involved. They are the home environment, peer group, and school. The learner learns formally as well as informally in the classroom culture, routine, and curriculum, and from teachers and peers (Anderson & Boyle, 2017:7). The mesosystem acknowledges that there are not just relationships and connections happening between the systems, but also between the factors within each of the systems (Anderson & Boyle, 2017:7). The exosystem is the environment that encompasses the immediate learning environments like leadership structures, school staff, school cultures, values and ideologies, support models collaborative patterns, and school policies and processes. The macrosystem refers to the environment that encompasses the learning institution, like the social, political, global and historical context, education systems, and the curriculum.

In South Africa, the Department of Education implemented a health promotion programme that aims to create a healthy school environment by promoting the general health and well-being of learners and educators, and addressing key health and social

barriers to learning to promote effective teaching and learning. Its strategic objectives are to increase awareness of and further health behaviours to encourage early identification and medical care of health issues in learners (DoE, 2016:145).

Each school is expected to have a Health Committee, tasked with drawing up a School Health Policy, and a School Health Team led by a professional nurse. The recommended norm for delivering individual learner assessments is one professional nurse for every 2 000 learners to be assessed per year (DoE, 2013:20). High schools present Life Orientation as a subject in which some of the health issues like HIV, AIDS, Tuberculosis, and sexual and reproductive issues are addressed.

The Integrated School Health Policy states that learners in the senior and FET phases should also be screened for weight and body mass index, vision, oral health, chronic or long-term health conditions, and mental/psychosocial health issues (DoE, 2013:13). The nursing staff needs to be primarily designated as school health staff, rather than as an add-on to other duties. The Department of Health can also make use of retired nurses, enrolled nursing assistants, and community-based organisations (DoE, 2013:20).

The implementation and operation of a School-Based Support Team (SBST) at every public school in South Africa addresses the learning barriers of learners. As soon as a teacher identifies a need for support and refers the learner to the SBST, a Support Needs Assessment 1 (SNA 1) form must be completed. The principal, parents, social worker, and psychologist are important role players in the SBST. Wilder and Lillvist (2018:67) suggest that all role-players need to respect each other and work towards the same goals.

The cleaning and teaching staff need to secure a clean classroom environment. Ventilation as part of environmental assessment forms part of the on-site services that should be rendered at schools. The above-mentioned committees are partially in the hands of the teachers, whose main priority is teaching. More intensive support is needed from the Department of Education to ensure that these committees are functional.

This research will explore the experiences of learners, parents, and teachers with chronic dermatological disorders. The main question to be answered is to what extent the chronic dermatological disorder influences the learning of the learners. Parents will share their

experiences of living with their children who have chronic dermatological disorders. Similarly, teachers will share their experiences teaching learners with chronic dermatological disorders. By noting these experiences, the researcher wants to study how the teachers accommodate the daily challenges of learners with chronic dermatological disorders. Additionally, the Department of Education's existing health policies will be reviewed, with a focus on how learners with chronic dermatological disorders are accommodated.

In this study, the focus will be on Bronfenbrenner's micro-, meso- and exosystems, as the researcher wants to capture the daily experiences of learners with chronic dermatological disorders. Parents and teachers will be interviewed to not only explore their experiences with learners who have chronic dermatological disorders, but also discover how they can ensure that a communication and support system is established. By focussing on a few relevant policies of the Department of Education, the researcher wants to discuss how the exosystem influences the learning of learners with chronic dermatological disorders.

1.3 LITERATURE REVIEW

This research was primarily undertaken to study the influence of chronic dermatological disorders on learners' health, behaviour, and attitude towards learning. The researcher also explored the role of teachers in ensuring an environment conducive to learning for learners who suffer from chronic dermatological disorders.

1.3.1 Exploring chronic dermatological disorders

In a study done by Mohammedamin, Van der Wouden, Koning, Van der Linden, Schellevis Van Sutjlekom-Smit and Koes (2006:6), it was found that the overall incidence rate of all skin diseases combined decreased whereas the incidence rates of bacterial, mycotic, and atopic skin diseases increased. "Skin diseases are not usually recognized as a major public health problem in developing countries, despite the fact that a recent report by the World Health Organization (WHO) estimates that 21–87% of the general population in developing countries has skin disease" (Hu, McKoy, Papier, Klaus, Ryan, Grossman, Masenga, Sethi, & Craft, 2011:1).

Furthermore, according to Mohammedamin et al. (2006:1), atopic skin disorders are on the increase, which means that there are more learners with atopic skin disorders like eczema and dermatitis. Atopic means that more learners are prone to develop allergic reactions such as hay-fever, asthma, or urticaria after exposure to immune responsive substances such as pollen, food, and insect venoms due to hereditary factors (Farlex, 2019:1).

Although skin disorders are not regarded a major health issue by the World Health Organization, there are some skin disorders that are irritating, chronic, and debilitating to learners' health and learning. In 2018, one in every five children and one in every 12 adults in the United Kingdom suffered from one of the skin disorders namely eczema (Parry, 2018:1). Nearly 90% of teenagers had acne, and half of them continued to experience symptoms as adults (Dawson & Dellavalle, 2013:1).

No effective treatment exists for a skin disorder called the Oudtshoorn Skin, which affects one in every 7 200 white people and one in every 90 000 coloured people in South Africa (Ramsay & Ngcungcu, 2017:1). In the United Kingdom, more than 3.5 million people with acne visit general practitioners annually. General practitioners must therefore be equipped to treat acne (Dawson & Dellavalle, 2013:1).

1.3.2 Causes of chronic skin disorders and their effect on learners

1.3.2.1 *Stress*

According to the Tibb Institute (2009:1), the main causes of chronic skin disorders in learners are stress, medication, genetic factors, fungus, bacteria, a weakened immune system, and contact with allergens.

Learners stress about school, exams and passing, which leads to acne, eczema, and other skin disorders. Research done with 22 university students (to examine whether examination stress influences acne) showed that acne worsened during examination periods. It also suggested that emotional stress might have a significant impact on acne (Chiu, Chon & Kimball, 2003:7).

Stress also increases psychological stress levels and lowers the permeability barrier function. A study done about psychological stress and the epidermal permeability barrier

function, with 27, medical, dental, and pharmacy students, showed that during times of lower stress levels, participants had lower psychological stress levels and improved permeability barrier recovery kinetics (Garg, Chren, Sands, Matsui, Marenus, Feingold & Elias, 2001:1). A prevention strategy for chronic skin disorders of learners, would thus be to control their stress levels.

1.3.2.2 *Allergies*

A patient with atopic eczema has a skin reaction to irritants, food, and environmental allergens (cat/dog/dust mite). Allergies to certain foods can irritate a learners' skin, causing skin disorders like eczema. As a result, the skin appears red, flaky, very itchy, and is prone to bacterial infections (Allergy Society South Africa, 2013:1).

Symptoms of food allergies may appear almost immediately or up to two hours after the food was consumed. Symptoms can include a tingling sensation of the mouth, swelling of the tongue and throat, hives, skin rashes, vomiting, abdominal cramps, difficulty breathing, diarrhoea, a drop in blood pressure, or even a loss of consciousness (Abrams & Sicherer, 2016:1).

Getting tested and detecting allergens as early as possible is of utmost importance to prevent skin damage. Keeping a food journal can also help learners to identify allergens, which could help avoid allergic reactions. Wheat, dairy products and fish are some of the common allergy-causing food. The triggering of aero allergens can also be avoided by using dust-proof bed and pillow covers, exposure to sunlight, washing with special soap and washing powder and regularly washing the bedding in hot water (Cole & Faad, 2021:15).

The importance of the learners taking responsibility for regular and continued skin care should be emphasised and encouraged by dermatologists, doctors, and parents.

1.3.2.3 *Weakened immune system*

Learners that are HIV positive are at risk of chronic dermatological disorders because of low immunity or low CD4 count. A low CD4 count is when a person has lower than 200 t-cells per cubic millimetre. According to Verville, Kinman and Jewel (2018:1), about 90% of people with HIV will develop a skin condition during the course of their disease. The

skin conditions can be divided into three categories namely inflammatory dermatitis or skin rashes, fungal, viral and parasitic infections and infestations, and skin cancers (Verville et al., 2018:1).

1.3.3 The effect of chronic skin disorders on parents

According to Gupta and Singhal (2004:1), families of children with disabilities experience stress because of the extra responsibilities that they must endure. They also mentioned that the prognosis of a child with disabilities is determined by the family's attitude, finances, and access to treatment. If these environmental factors are not favourable, it could lead to the parents and siblings experiencing helplessness, guilt, and depression (Gupta & Singhal, 2004:23).

Parents play a very important role in the different developmental phases that their children go through. Parents are responsible for the habits of children, i.e. during puberty a skin routine needs to be established to prevent the development of severe acne (Ceka & Murati, 2016:61). They can also play a vital role in encouraging learners with chronic dermatological disorders. Parents should be motivated to learn as much as possible about the disorder, as a thorough understanding of the dermatological disorder would aid parents (and subsequently siblings) to stop treating the affected child as abnormal. Once that hurdle is successfully negotiated, parental love can act as motivating agent.

It is also parents' responsibility to get learners tested for allergies. Allergy testing can be used to identify specific allergens, trace the course of the disease and seasonal flare, and compare the reaction and efficacy of the therapy. The four allergy tests that are commonly performed are the Skin prick test, Atopy patch test, In vitro allergy diagnostics, and the Oral provocation test (Prucha, Chen, Traidl-Hoffmann, Todorova, Akdis, Lauener & Ring, 2013:2). Since parents are also mainly responsible for their children's healthy diet, they need to find alternative food products (in the case of an allergy) that will ensure that learners receive the necessary nutrients.

Some parents ignore the child's skin disorder and refuse to go for medical help. Some of the reasons for not attending to the problem might be working conditions that do not allow paid leave, distance from closest medical care, and finances. Lack of services and

negative attitudes are environmental risk factors that can also have a harmful effect on the likely outcome of learners with disabilities (Bogotch & Shields, 2013:889).

1.3.4 The effect of chronic skin disorders on teachers and in the classroom

Chronic skin disorders can manifest in the classroom through learners' unwillingness to participate in class activities. If a learner is negatively judged on the appearance of their skin, it could lead to anxiousness and self-consciousness that prevents social interaction which is needed for learners to participate in class activities (Clay, 2015:56).

Minimal class participation and absenteeism are barriers in learning that teachers have to report to the School-Based Support Team. The teacher has to fill in a Student Need Assessment form, a confidential form, that is used as intervention by the teacher to report the learning barrier (DoE, 2014:48). Parents and learners should therefore not be ashamed because of barriers in learning that the learners experience. Labelling, teasing, aggression, and bullying are just some of the consequences of learning barriers. All these issues cause disruption in class and stress for teachers.

1.3.5 Guidelines to support learners with chronic skin disorders worldwide

In 2016, the United Kingdom developed a School information pack that addresses eczema, which is available to every teacher. The School Pack has four goals:

- Help staff understand and meet the needs of children with eczema.
- Advise staff how to help children with eczema integrate into their class/the school routine and gain confidence in managing their eczema.
- Equip teachers with tools to teach their class about eczema to encourage understanding and compassion among peers.
- Form the basis of an informed ongoing dialogue between teacher and parents/carers regarding a child's condition (National Eczema Society, 2016:2).

The National Eczema Association in America suggest that parents provide their children with a school care kit that consists of gloves, hand sanitiser, moisturiser, antibiotic cream, adhesive bandages, gauze pads, spare bandages, protective clothing, written instructions on the medication limitations, and special precautions for sport (National Eczema Association, 2017:1). Additionally, the American Academy for Dermatology developed

lesson plans and handouts informing learners about different skin diseases, treatment of the skin, and self-esteem (American Academy of Dermatology, 2021:1).

In South Africa, a psoriasis and eczema kit consisting of a pure oil clay soap, argan oil, and calcium bentonite clay is available at Clicks and Wellness Warehouse. These eczema kits could also be adapted for other skin disorders by adding products that are allowed at school.

The above-mentioned research implies that increased psychological stress and examination stress influences learners' skin (Chiu, Chon & Kimball, 2003:7). A person with eczema has a shortage of the strengthening and tightening protein, claudine-1 (University of Rochester Medical Centre, 2010:1). Continued treatment leads to successful results. However, continued medical treatment is less accessible, less affordable and less culturally acceptable than traditional healers in African countries like Tanzania (Hu et al., 2011:10).

South Africa has all the necessary policies (on paper) to support the health of learners. However, these policies are not always applied. The focus should be shifted to the application of the policies available for ensuring success in education for learners with chronic dermatological disorders.

1.4 TERMINOLOGY

It is important to define certain definitions and concepts that form the core of the study. These terms should be clearly defined to enhance the understanding of the problem and avoid ambiguity.

1.4.1 Dermatology

Dermatology is an aspect of medical science that deals with the skin, skin diseases and related treatment (Ferrone, 2018:1). Merriam Webster dictionary (2021:1) adds that dermatology is a branch of medicine concerned with the skin's structure and functions. People's organs and emotions influence their skin condition. An example of this is when learners with emotional issues, like stress, develop a rash (Grossbart & Sherman 2009:25). People with cancer usually develop bruises on their skin. People with liver problems usually have jaundice or yellow skin (Tewari, Mocan, Parvanov, Sah, Nabavi,

Humeniecki, Ma, Lee, Horbańczuk & Atanasov, 2017:2). Conclusively, dermatology deals with the skin, it's structure and functions, skin diseases, treatment, and how organs and emotions influence the skin.

1.4.2 Dermatitis

Dermatitis is just one of hundreds of skin disorders that affect humans. It affects mostly infants, and most people outgrow it by the age of 16 or 17. "Dermatitis is a skin disorder that causes inflammation of the skin" (Martinez, Ferrone & Lowenstein, 2018:1). While dermatitis is more severe than eczema, eczema is a chronic condition. The symptoms of dermatitis include an itchy rash and red skin (Martinez et al., 2018:1).

"Your skin is a barrier designed to keep bacteria and infections out" (Kmieck, 2015:3). The latest research shows that deficient or missing filaggrin proteins compromise the epidermal barrier, making it less able to provide a comprehensive defence against external insults like stress, irritable bowel syndrome medication, weakened immune system, fungus, genetic factors, contact with allergens, bacteria trapped in skin pores, and viruses. These external insults cause the skin to become itchy and inflamed (Tibb Institute, 2009:1).

1.4.3 Learning barrier

"A barrier to learning is anything that stands in the way of a child being able to learn effectively. A learner may experience one or more barriers to learning throughout his or her education" (DoE, 2006:1). The White Paper 6 refers to learning barriers as barriers to learning and development. The internationally correct terms of disability and impairment will be used when referring to learners whose learning and development barriers are formed in organic medical causes (DoE, 2001:12).

"When identifying the barriers to learning it is important to look at students' holistic needs. This would include: cognitive (learning skills), environmental (learning experience), and progress in basic attainments (literacy acquisition)" (Reid, 2009:1). Health issues should thus also be considered barriers to learning. However, some learners can also hide their needs or health issues for fear of embarrassment in class. The researcher is of the opinion that concealment of skin disorders, inability of teachers to identify learners with chronic

dermatological disorders, and inadequate treatment are all barriers that might prevent learners from learning effectively.

There are two types of learning barriers: intrinsic and extrinsic. Intrinsic barriers include physical, sensory, neurological, and developmental impairments, chronic illness, psychosocial disturbances and differing intellectual ability. Extrinsic barriers are those factors that arise outside learners, e.g., societal or environmental, that impact their learning (DoE, 2006:1). According to Winebrenner (2014:45), when the body is in distress, the brain stem focuses on the discomfort and no learning takes place. A learning barrier can therefore be described as intrinsic or extrinsic factors that prevent learners from learning effectively.

1.4.4 Chronic illness

A chronic illness is an illness that cannot be cured and must therefore be managed as a lifelong commitment. The mismanagement or inefficient treatment of such an illness may lead to functional impairments such as loss of vision or limitations in physical activity. At the point where chronic illness results in functional limitations, it is seen as a disability (African Child Policy Forum [ACPF], 2011:9). The definitions of chronic illness and learning barrier underpin the fact that skin disorders among learners can be a contributing factor to limiting their learning.

1.4.5 Inclusive education

In the South African context, learners were excluded from education based on race. Learners with disabilities were most affected because education for learners with disabilities were only compulsory for white learners. The schools for white learners with disabilities also received more funds than the schools for the other ethnic groups (Donohue & Bornman, 2014:2). The destructive effects of apartheid are clearly visible in special needs education, as learners are segregated based on race and disability (DoE, 2001:9).

Inclusive education is when all learners, regardless of any challenges they face, are placed in age-appropriate general education classes in their own neighbourhood schools where they receive high-quality instruction, intervention, and support that enables them

to successfully complete the core curriculum (McManis, 2017:1). Inclusive education is therefore one of the methods that can be used to ensure successful results for learners with chronic skin disorders.

1.5 PROBLEM STATEMENT

The problem that the researcher detected both at home and at the Secondary School where the research was done, is that some learners with chronic dermatological disorders, such as eczema struggle to concentrate and focus on learning presumably. Poor health, absenteeism, and isolation from social activities also place them at risk to not complete school, which could result in poverty. An effective health system is needed to break the cycle of poor health that leads to poverty (Roberts, 2017:1).

These learners find learning especially challenging during exams because when stress levels are high, they itch and can hardly focus on studying. Furthermore, research confirmed that stress aggravates skin disorders. Poor skin repair was also linked to higher psychological stress levels which students usually experience during exams.

“Sufferers, or parents of children with eczema, know only too well how debilitating this condition can be, not only physically but on an emotional level as well” (Bhikha-Vallee, 2009:1). “For example, children with asthma and other chronic illnesses may experience recurrent absences and difficulty concentrating in class” (Center on Society and Health, 2014:6). Considering the research and problems the researcher identified in learners with skin disorders, the following research questions were compiled.

1.5.1 Research questions

The researcher observed that some learners at the Secondary School had chronic acne and eczema, causing them to struggle at school. This led to the following research question: What challenges do learners with chronic dermatological disorders experience in school?

To identify these challenges, the following sub-questions were researched:

- How do chronic dermatological disorders affect learners’ learning to the extent that it might become a learning barrier?

- How do chronic dermatological disorders influence learners' behaviour in class?
- What are the experiences of parents with children who suffer from chronic dermatological disorders?
- What solutions do the Department of Education's health system for schools provide for learners' chronic dermatological disorders?
- What measures can teachers take to help learners with chronic dermatological disorders adapt to the classroom?

1.5.2 Research aims and objectives

The aim of the research is to:

- Establish the extent to which learners with chronic dermatological disorders experience it as a barrier to learning.
- Document how the parents of children with chronic dermatological disorders are affected by their children's skin condition.
- Investigate the effects of dermatological disorders on learners' behaviour in class.
- Investigate how health policies for South African schools make provision for learners with dermatological disorders.
- Identify how teachers can help learners with dermatological disorders cope with the challenges that they experienced in class and at school.

1.6 RESEARCH DESIGN AND METHODS

An empirical study will be used to test previous claims about chronic dermatological disorders and the effect that it has on learning. An empirical study describes the reality as we perceive or experience it and knowledge arises from experience (Johnson & Christensen, 2014:57). For this reason, the indirect observation of the researcher, as well as experiences of learners, teachers, and parents will be used during this empirical study.

The questions under study are clearly defined, and the collected data might answer them. If the answers are not sufficient, further study will have to be done.

1.6.1 Research design

The research design articulates the data required, what methods to use to collect and analyse this data, and how all this is going to answer the research question. The research design also reflects the purpose of the inquiry, which was characterised as an exploratory study. This is appropriate in addressing a topic about which there are high levels of uncertainty and ignorance.

The main aim of this study is to explore the experiences of learners, parents, and teachers. The generation of primary data will be done in the form of a case study. The case study will consist of interviews with the teachers and parents, and questionnaires consisting of open-ended questions to be completed by the learners. The case intends to provide detailed account of the case at hand within context, which is the experiences of learners with chronic dermatological disorders, the experiences of parents with children with chronic dermatological disorders and how teachers accommodate the learners with chronic dermatological disorders in class (Yin, 2018:45).

1.6.1.1 *Research paradigm*

The interpretive paradigm is based on the idea that social reality is not objective, but rather shaped by human experiences and social contexts. It “assumes that reality as we know it is constructed inter subjectively through the meanings and understandings developed socially and experientially” (Cohen & Crabtree, 2006:1). It should therefore be studied within its socio-historic context and consist of the subjective opinions of the participants.

Since the researcher’s aim is to understand dermatological disorders from the point of view of the participants, the focus will be on participants’ words, actions, feelings, and understanding of what they experience. The researcher will then summarise the patterns, trends and themes gathered from the research.

1.6.1.2 *Research approach*

The qualitative approach was selected for this study due to the nature of the research problem and the researcher’s personal experiences. Qualitative research aims to explore and understand the meaning that individuals or groups ascribe to a social or human

problem (Johnson & Christensen, 2014:87). The process involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher interpreting the meaning of the data. Furthermore, the final written report has a flexible structure.

Those who engage in this form of inquiry support a way of looking at research that honours an inductive style and focuses on individual meaning and the importance of rendering the complexity of a situation (Creswell & Poth, 2014:21). This approach will enhance self-knowledge about the effects of dermatological disorders on education and the use of inclusive education, and use this knowledge to eliminate learning barriers in learners suffering from skin disorders.

Pietkiewicz and Smith (2012:1) also state that qualitative research allows the researcher to uncover the meaning of the topic being researched, investigate how participants make sense of the world, and experience events and what meaning they attribute to phenomena. "A great deal of qualitative research aims to provide rich descriptive accounts of the phenomenon under investigation" (Pietkiewicz & Smith, 2012:1). DeFranzo (2011:1) adds that qualitative research helps the researcher to understand the underlying reasons for the phenomenon.

In this research, one of the aims is to explore the extent to which learners with chronic dermatological disorders experience it as a barrier to learning. With the help of the qualitative case study, the researcher hopes to get deeper insight into the thoughts of learners and parents, and actions of teachers towards learners with dermatological disorders.

1.6.1.3 *Research type*

This exploratory study will document the experiences of learners, parents and teachers with chronic dermatological disorders.

1.6.2 Research methods

Research methods are the strategies, processes, and techniques utilised during data collection to uncover new information and better understand the research topic.

1.6.2.1 *Research participants*

The research participants will be grouped into three population categories:

- Grade 10–11 learners of the Secondary School that suffer from dermatological disorders. These are the learners that the researcher is working with daily and where the researcher detected some dermatological disorders.
- The Grade 10–11 teachers at the Secondary School who teach the learners at the school.
- The parents or guardians of preferably the Grade 10–11 learners previously identified.

1.6.2.2 *Sampling method, size, and participation selection*

Sampling method

Purposive, convenience sampling (also called judgmental sampling) was identified as the most appropriate method of sampling for the study. As the term suggests, the sample is chosen based on the judgement of the researcher. The sample that the researcher chose consists of elements that are most representative of the population and serve the purpose of the study best (De Vos, Strydom, Fouché & Delport, 2011:392). The sampling will be homogeneous because every participant will have similar or identical traits, which means that they will have to meet the criteria for the research.

Sampling size

- Eight learners from Grade 10–11
- Five of the Grade 10–11 teachers
- Two of the parents preferably of the learner participants

Participation selection

Some basic issues to consider when selecting research participants include demographic and psychographic characteristics, knowledge of the research issue, and the geographical location where potential participants live. Only participants who are able to enhance the understanding of the phenomenon under study will be selected.

Eight Grade 10 and Grade 11 learners will comprise the sample for the first category of participants. The choice of the small sample size is based on the view of Brink, Van der Walt, and Van Rensburg (2018:128), which says that in qualitative research, where sampling is done purposively, too many participants would increase the complexity of the analysis process.

The researcher will ask the Grade 10 and 11 class teachers to identify learners with chronic dermatological disorders. The criteria for identification will be absenteeism, scratching, and dermatological disorder, of which the dermatological disorder is compulsory. The identified learners will then be telephonically contacted. From this group, eight available learners will participate in the research.

For the second category, five teachers will take part in a focus group interview. All the Grade 10–11 teachers will be informed about the research and those interested in the topic and in participating will be approached. During the focus group interview, the researcher will document their experience and knowledge of working with learners that suffer from chronic dermatological disorders. The purpose of including teachers in the research is to discover how much they know about chronic dermatological disorders and how they make the classroom more accessible to learners suffering from these disorders. The criteria for possible teacher participants will be their interaction while teaching learners with dermatological disorders. Only five teachers will take part in research to allow each participant to have enough time to participate in the interview. Five participants also allow effective social distancing during COVID-19 pandemic.

Parents are included in the research to document their experience of living with children with chronic dermatological disorders and propose co-operation between parents, teachers, and learners. The parents will be approached, informed about the research and selected preferably from the parents of the learners who were identified for category one. Out of this group, at least two volunteers will participate in the research. The criteria that are compulsory for the parent participants are having a child with a chronic dermatological disorder as well as access to a phone. Arrangements and consent for individual interviews will be obtained. These in-depth individual interviews will be used to gather information about the influence of chronic dermatological disorder on learning.

1.6.2.3 *Data collection*

For this case study, two data collection instruments were identified and applied: Interviews and questionnaires.

Interviews

Interviews of 40+ minutes will be conducted with the teachers and parents. While the interviews with parents will be done telephonically, the researcher will arrange a suitable venue for the focus group interview with the teachers. Interviews are used to enable the researcher to listen to and understand the participants' perception, understanding, and experiences. In both interviews, the researcher will act as interviewer and, with the consent of participants (parents and teachers), record the interviews. The telephonic interviews might be difficult because the interviewer will not have eye contact with the parent.

Interviews with the teachers are about their knowledge, treatment, and actions towards learners with dermatological disorders. The in-depth interviews with the parents will be to gain information on their experiences with children with dermatological disorders. To make the parents feel comfortable, the researcher will have a casual or informal telephonic conversations with them beforehand.

Semi-structured questions will be used during the interviews, as they will allow the researcher to gain more information about the participants' beliefs about the topic. It also gives the researcher flexibility to follow up on interesting information that emerges in the interview (De Vos et al., 2011:351). Predetermined questions are going to be asked, but the order of the questions could be modified based on what seems more relevant for a particular participant. The questions could also be influenced by the flow of the interview. If additional information is required, follow-up interviews could be arranged.

Questionnaires

For the case study to be both reliable and valid, it is important that the questions are constructed properly. In this case study, eight learners who suffer from chronic dermatological disorders will answer a questionnaire (consisting of open-ended

questions) online. Open-ended questions will ensure that participants have enough room to share their experiences with dermatological disorders at home and school.

Open-ended questions are not appertaining to assumptions and are suitable for use in explanatory studies, case studies, or studies based on qualitative analysis of data (Brink et al., 2018:138). The questions will also be formulated to understand the influence of dermatological disorders on learning. The researcher will be available telephonically if the participants do not understand the questions. The researcher can also be reached via e-mail. The analysis of the open-ended questions will be done by coding and reducing the data. This will be done carefully to prevent losing important information. The topics, issues, similarities, and differences, as described by the participants, will be identified (Sutton & Austin, 2015:228).

1.6.2.4 *Data analysis and interpretation*

Babbie (2013:389) describes qualitative data analysis as "the non-numerical assessment of observations made through participant observation, content analysis, in-depth interviews, and other qualitative research techniques".

The Interpretive Phenomenological Analysis approach of research will be used because the objective is to make sense of learners' experiences (Pietkiewicz & Smith, 2012:2). Both the interviews and questionnaires will be analysed manually, and then coded to refine the data obtained.

After the data has been collected through interviews, the researcher will transcribe all the interviews verbatim and analyse them qualitatively. Thematic content analysis will be used to analyse data (Burnard, Gill, Stewart, Treasure & Chadwick, 2008:429). The researcher will make use of participant validation, which means that the participants will review her interpretation.

1.6.2.5 *Ensuring trustworthiness*

The trustworthiness of qualitative research is generally often questioned. The researcher could be biased in three different areas namely sampling, procedure, and measurement. The researcher must therefore make sure that no one is omitted or excluded from the research. All learners with chronic dermatological disorders that are known to the

researcher has an equal opportunity to partake in the research. Additionally, the research procedure will be fair, and no learner will be obligated to answer questions in a specific manner.

To avoid measurement bias, the researcher will use data source triangulation, which involves using more than one source (interviews and questionnaires) to gather data (Noble & Heale, 2019:67). This method ensures that enough data is gathered through the questions and interviews and that it can be cross verified.

1.6.2.6 *Ethical measures*

Informed permission will be requested from the Department of Education and the school principal. Permission, consent, and assent will also be obtained from teachers, parents/guardians, and learners participating in the study. All participants will be informed that their participation is voluntary and that they are free to withdraw at any time. Participants will also be guaranteed confidentiality and anonymity.

1.7 CHAPTER DIVISION

Chapter 1 contains the introduction, problem statement, motivation, aim, and research questions of the study.

Chapter 2 covers previous research on the influence of dermatological disorders on learning, learners' experiences with any form of skin disease in the classroom, dermatological disorders as a learning barrier, and the role of parents, the DoE, and teachers in working with learners with skin diseases.

Chapter 3 outlines how the DoE includes learners with chronic diseases in the educational system.

Chapter 4 describes the research methodology and approach.

Chapter 5 analyses and interprets the data.

Chapter 6 concludes the research and makes recommendations.

1.8 CONCLUSION

Chapter 1 introduced chronic dermatological disorders as a barrier to learning. It includes a literature review about the rights of all learners to receive an education worldwide, and more specifically in South Africa. Additionally, the problem statement, research questions, research design and methods, and terminology used in the study were also explained.

CHAPTER 2

DERMATOLOGICAL DISORDERS

2.1 INTRODUCTION

The purpose of this chapter is to present a theoretical understanding of chronic dermatological disorders and how they can affect adolescent learners. To understand the problems that learners with dermatological disorders experience, it is important to also study what causes them, the available treatment, and its effectiveness.

The Greek term for dermatology is *dermatos*, which means “of skin” (Green, 2019:1). Green (2019:1) states that dermatological practices and the interest to treat sicknesses have been around since ancient times. Skin disease and treatment were already mentioned in Ancient Chinese, Indian, Egyptian, Middle Eastern and European scripts (Griffiths, Barker, Bleiker, Chalmers & Creamer, 2016:6). The treatment of unhealthy skin, hair, and nails was important in the ancient times, because people were conscious about their outward appearance. The Egyptians used arsenic substances to treat skin cancer, honey for acne, and sandpaper for leprosy (Green, 2019:4).

According to Khalifa, Haditi, Lami, and Diwan (2010:210) a skin disease is a major health problem that affects a high proportion of the population and causes distress and disability. Additionally, women, senior citizens, and children’s quality of life tend to be more affected by skin diseases than men. A South African study found that women’s self-esteem and dress code were influenced by skin disorders, senior citizens were more prone to disability because of skin problems, and twenty-six percent of Brazilian children with scabies were being teased because of skin problems (Seth, Cheldize, Brown & Freeman, 2017:4). Children who are being teased can develop mental illnesses, social phobias, and anxiety.

A South African study found that patients with dermatological disorders have a poorer quality of life than those without skin disorders (Seth et al., 2017:4). The areas in which these patients showed a noticeable poorer quality of life were depression, anxiety, effect on work, dress code and caregiving (Seth et al., 2017:4).

The burden of skin diseases in high-, as well as low-income countries, are very high. Therefore, the Global Burden of Skin Disease of 2010 advised that the prevention and treatment of skin diseases should become a priority in health departments worldwide (Hay, Johns, Williams, Bolliger, Dellavalle, Margollis, Marks, Naldi, Weinstock, Wulf, Michaud, Murray & Naghavi, 2014:1527).

The medical model suggests that disease is detected and identified through a systematic process of observation, description, and differentiation, in accordance with standard accepted procedures, such as medical examinations, tests, or a set of symptom descriptions (Swaine, 2011:1). A medical model enhances the development and application of medical knowledge and helps the patient understand the causes and diagnoses of diseases (Thagard, 2005:1). From this perspective, dermatological disorders will be discussed in this chapter.

2.2 THE PRESENCE OF DERMATOLOGICAL DISORDERS

According to the World Health Organization (2019:1), diseases of the skin are classified as factors that affect the epidermis, its attachments like hair, hair follicles, sebaceous glands, apocrine sweat gland apparatus, eccrine sweat gland apparatus, nails and associated mucous membranes (conjunctival, oral, and genital), the dermis, the cutaneous vasculature, and the subcutaneous tissue (sub-cutis). The skin diseases that are included in this classification are diseases of the epidermis, dermis, epidermal appendages, and cutaneous vasculature. However, the diseases of the skin that will be focused on in this study, will be that of the epidermis and dermis.

Inflammatory skin diseases consist of three categories, namely disorders of acquired immunity in skin, disorders of innate immunity in skin, and diseases of the barrier of the skin (Dainichi, Hannakawa & Kabashima, 2014:82). Acquired immunity is divided into immune hyperactivity or allergy, immunodeficiency, or autoimmunity. The disorders of innate immunity in skin can be classified as innate immunodeficiency, innate immune hyperactivity, and innate autoimmunity. There are two types of skin barriers: chemical and physical. Defects in these barriers can cause skin diseases. One example is atopic dermatitis, which is a skin disorder caused by a defective physical skin barrier (Dainichi et al., 2014:82-85).

2.2.1 The anatomy and physiology of the skin

The skin represents 15% of the total adult body weight, which makes it the largest organ in the body. It has three layers namely the epidermis, dermis, and subcutaneous tissue, of which the epidermis is the thin protective outer layer. Kolarsick, Kolarsick and Goodwin (2011:2) describe the epidermis as having four layers called the basal cell layer (stratum germinativum), squamous cell layer (stratum spinosum), granular cell layer (stratum granulosum), and cornified or horny cell layer (stratum corneum). These epidermal cells have the important function of lining the hair follicles, sebaceous glands, and sweat glands (Bianchi, Page & Robertson, 2011:7). However, the stratum corneum in particular is the hardened part of the outer layer that has a protective function (Bianchi et al., 2011:7).

The second layer of skin, called the dermis, is tough and elastic and provides nutrients and physical support to the epidermis. The nerves, sweat glands, sebaceous glands, hair follicles and blood vessels are also enclosed in the dermis (Bianchi et al., 2011:7). The nerve endings are responsible for pain, touch, temperature, pressure and protection. The hair follicles produce the different hair types and helps with protection and sensation. The blood vessels help with temperature regulation (Bianchi et al., 2011:1).

The dermis consists of two layers, the papillary and reticular layer. The reticular dermis is thick and contains connective tissue, blood vessels, elastic fibres, and collagen. Within the reticular layer are the following key cell types: fibroblasts, mast cells, lymphatic vessels, epidermal appendages or rete pegs, and ground substance, which are responsible for repairing tissue damage, fighting infection, defending against infection, preventing skin damage, supporting the dermis cells, and providing structure to the area (Bianchi et al., 2011:8).

Below the dermis is a layer of fat and connective tissue called the subcutaneous tissue, or hypodermis, which is a buffer and padding on the inside of the body. According to Kolarsick et al. (2011:10), the subcutaneous tissue, also known as an endocrine organ, provides energy and agile movement to the body.

The skin has many important functions, including protecting against external physical, chemical, and biologic aggressions (Kanitakis, 2002:1). Consequently, Kmieck (2015:3) describes the skin as a barrier that prevents bacteria and infections from entering the body. Hijazy (2000:16) also attributes the following functions to the skin:

- regulating body temperature
- averting the loss of essential oils and excess
- blocking toxic substances
- protecting against the harmful effects of the sun
- mechanical support
- immunological functions
- senses like touch, heat, cold, socio-sexual and emotional senses
- producing vitamin D

The complex anatomy of the skin that appears thin and simply one-layered, emphasises the importance of the skin. Each layer has a specific function. The epidermis protects the dermis, regulates body odour and temperature, and the subcutaneous tissue supports and stores energy. In addition, the immunological function of the skin is important because a low immunity causes inflammatory skin diseases. Cleansing, moisturising, hydrating, and protecting against external elements like the sun, are of utmost importance to ensure a healthy skin.

2.2.2 Skin diseases/disorders

The International Classifications of Impairments, Disabilities and Handicaps (ICIDH) describes chronic diseases as long-term, relapsing, non-self-limited illnesses. According to Shaw and McCabe (2007:74), it can also restrict a person from fitting into socially acceptable roles. Additionally, they may manifest as acute outbreaks or a slow onset, which has a psychosocial impact on the patient (Gollnick, Finlay & Shear, 2008:280).

The skin of a person who has a skin disorder is not consistent with the description of the functioning of the skin. The latest research shows that deficient or missing filaggrin proteins compromise the epidermal barrier, making it less able to provide a comprehensive defence against outside insults (Lewis-Jones, 2019:3). People with a

filaggrin deficiency are more likely to be allergic to nickel, medication, rubber, perfume, and preservatives in cosmetics (Lewis-Jones, 2019:5). Agony and discomfort are synonymous to skin diseases. The functions of the skin emphasise how highly sensitive and uncomfortable any skin disorder could be. Ineffectiveness in daily tasks and disturbed behaviour are automatic consequences of impairment of the skin.

A dermatological disorder can thus be considered a chronic disorder because it appears over an extended period of time and causes socially unacceptable behaviour.

2.2.3 Diagnosing skin diseases

The question that arises when diagnosing skin diseases is: What symptoms need to be present for a person to be diagnosed with a skin disease? The requirements that the Japanese Dermatological Association used in 1994 to diagnose somebody with atopic dermatitis are: itching, rashes, and chronic recurrent progression (Katayama, Kohno, Akiyama, Aihara, Kondo, Saeki, Shoji, Yamada, Nakamura, and Japanese Society of Allergology, 2014:379). Thus, a continuous itching and scratching indicates that something is irritating the skin. A detailed history-taking and allergen tests will help determine the food allergens (Katayama et al., 2014:383).

In a qualitative study done in Germany, spot diagnosis, stepwise refinement, pattern recognition trigger, and test of treatment were identified as procedures used by general practitioners to diagnose dermatological diseases. They used identification, application of the test of time, therapeutic trials, and consultation with experts (including referrals to specialists) if they were uncertain about a diagnosis (Rübsam, Esch, Baum & Bösner, 2015:594).

The International Classification of Diseases (ICD), also known as the International Statistical Classification of diseases and Related Health Problems, is the international standard diagnostic tool for epidemiology, health management, and clinical purposes. According to the regulations of the ICD, codes are used to diagnose diseases and classify signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or disease. These differentiation codes are used without descriptions of diseases to protect the patient’s privacy.

ICD-11 is the latest code system that will be effective from January 2022 (WHO, 2019:1). The ICD 10 code that was accepted in 2004 uses the code DSN12 (Diseases of the skin and subcutaneous tissue [L00–L99]), to classify skin diseases (Department of Health, 2012:24). In the code DSN0101, the abbreviation DSN refers to diagnosis standard national, the number 01 indicates the ICD-10 chapter, and the second 01 number indicates the standard. Doctors also use these codes to claim from medical aids (Department of Health, 2012:23).

2.3 THE ETIOLOGY OF CHRONIC DERMATOLOGICAL DISORDERS

The three main causes of skin diseases are poor hygiene, climate, and overcrowding. Other causes include genetics, stress, puberty, and poverty. Evers, Verhoeven, Kraaimaat, De Jong, De Brouwer, Schalkwijk, Sweep, and Van de Kerkhof (2010:986) confirm this statement by claiming that a growing amount of evidence indicates that stress causes psoriasis. The most common causes of skin disorders are discussed below.

2.3.1 Poor hygiene

According to Bezie, Deboch, Ayele, Workeneh, Haile, Mulugeta, Belay, Sewhunegn and Mohammed (2005:6), skin disease affects every part of the population and often occurs in children from lower socio-economic groups due to poor hygienic practices. Research done by Rafferty and Shinn (1991:1170) found that homelessness causes minor skin problems. Homelessness creates other problems like inaccessibility to sanitary facilities and toiletries, which leads to poor hygiene, which in turn makes people vulnerable to skin disorders like scabies. For example, pyoderma develops in children in Columbia due to poor hygiene (WHO, 2005:13).

In a study done in Nigeria, the high prevalence of infectious dermatoses indicated the state of the socio-economic development. Indicators included low socio-economic conditions and level of education, poor personal hygiene, inadequate environmental health practices, subsistence agrarian occupations, subsistence artisan occupations, petty trading, adverse socio-cultural practices, and low access to portable water (Kalu, Wagbatsoma, Ogbaini-Emovon, Nwadike & Ojide, 2015:5).

2.3.2 Overcrowding

Most participants in a study done by Thomas, Crooks, Tylor, Massey, Williams and Pearce (2017:232) lived in crowded places, had inadequate bathing facilities, and a lack of towels, bed linen, soap, and laundry facilities. Skin infections were contracted where people live in overcrowded and unhygienic circumstances (Thomas et al., 2017:232).

2.3.3 Climate and environment

Bezie et al. (2005:6) mention that according to different studies, skin infections are common in extreme climatic conditions. Varying hot climate in Columbia, rural India, rural Pakistan, and Southern America contributed towards children developing pyoderma. Its prevalence increased in hotter areas. Additionally, in India, pyoderma occurs more in summer than in winter (WHO, 2005:13).

2.3.4 Heredity/genetic factors

Skin disorders are also caused by the alteration of the DNA sequence that a person inherits from their parents. These inherited skin disorders are also known as genodermatoses or genetic dermatological disorders (Clark, 2010:1).

Genodermatoses are rare skin disorders that usually start after birth or early in life. Social exclusion, disability, and short life expectancy are possible consequences for people with genodermatoses. Symptomatic treatment is advised for these patients (Rare Skin Diseases Network, 2020:1). One example of genodermatoses is Epidermolysis bullosa (EB), which is a heterogeneous group of conditions recognised by blisters and erosions of the skin and mucous membranes after experiencing trauma. The clinical and genetic diversity of EB is reflected by the different types that reflect prominent features of the clinical phenotype and the mode of inheritance (Uitto & Christiano, 1992:687).

2.3.5 Stress

Research indicates that acne is aggravated during exams and changes in acne severity correlate highly with increasing stress. This suggests that emotional stress from external sources may have a significant influence on acne (Chiu et al., 2003:899). A lack of planning during exams, poverty (social class), puberty, weight, and diet, are just a few triggers that cause stress and aggravate skin disorders.

The stress and causes of stress experienced by learners with chronic skin disorders have a direct influence on school attendance, behaviour in class, and academic achievement. The mind and skin are connected through nerves. The skin is therefore very sensitive to your emotions, needs, wishes and fears (Grossbart & Sherman 2009:25). According to Clarke (2010:1), tension in the body releases stress hormones including cortisol, which may increase the skin's oil production, causing pimples to develop. This is not only true for acne. Flare-ups in psoriasis patients occur because of stressful life situations (Ceovic, Mance, Mocos, Svetec, Kostovic & Buzina, 2013:1).

2.3.6 Puberty

Teenagers experience different bodily changes during puberty, including the development of acne. Acne that develops during puberty has the potential of becoming a chronic dermatological disorder. Another example of a skin disease that could be activated by puberty is psoriasis. Psoriasis occurs in childhood, adolescence, and even adulthood (Ceovic et al., 2013:2). However, hormonal changes in all the different phases of a person's life could influence the onset of dermatological disorders.

2.4 TYPES OF CHRONIC DERMATOLOGICAL DISORDERS

The American Academy of Dermatology classifies skin diseases into 24 different categories.

Table 2.1: Categories of skin diseases

Disease category	Includes
1. Acne	Acne
2. Actinic damage	Actinic keratosis; solar dermatitis; sunburn; actinic dermatitis
3. Atopic dermatitis/eczema	Atopic dermatitis; eczema; dyshidrosis
4. Noncancerous skin growths (benign neoplasms/keloids/ scars/cysts)	Lipomas; benign neoplasms; hemangiomas; chalazions; cysts (including pilonidal pilar, and sebaceous); corns, calluses, and keratoderma; keloids; scars and fibrosis
5. Bullous diseases	Dermatitis herpetiformis; pemphigus; pemphigoid; other bullous dermatoses; erythema multiforme
6. Congenital abnormalities	Various hereditary and congenital conditions and anomalies, including ichthyosis congenita, vascular hamartomas, and congenital ectodermal dysplasia
7. Connective tissue disorders	Lupus; dermatomyositis; scleroderma; diffuse connective tissue disease
8. Contact dermatitis	Contact dermatitis; diaper rash; non-specified dermatitis
9. Cutaneous infections	Bacterial skin infections (including tuberculosis and leprosy); cellulitis; carbuncles; impetigo; onychia
10. Cutaneous lymphoma	Mycosis fungoides/Sezary syndrome; parapsoriasis

11. Drug eruptions	Drug dermatitis; Stevens-Johnson syndrome
12. Hair and nail disorders	Alopecia; telogen effluvium; hirsutism; hair and nail anomalies
13. HPV/warts/molluscum	Warts, including genital warts; molluscum contagiosum
14. Melanoma	Malignant melanoma
15. Nonmelanoma skin cancer	Basal cell carcinoma; squamous cell carcinoma; Kaposi sarcoma; carcinoma in situ
16. 16 Pruritus	Pruritus not otherwise specified; psychogenic skin disease; lichenification
17. Psoriasis	Psoriasis
18. Rosacea	Rosacea
19. Seborrheic dermatitis	Seborrheic dermatitis; seborrhea; blepharitis
20. Ulcers	Ulcers (all stages and causes); pyoderma gangrenosum
21. Urticaria	Urticaria (any cause)
22. Viral (HSV/HZV) and fungal diseases	Herpes simplex; herpes zoster; viral exanthemata; dermatophytosis; dermatomycosis; candidiasis
23. Vitiligo	Vitiligo
24. Wounds and burns	Burns (all degrees); lacerations; wounds; abrasions; bites; foreign bodies (e.g. splinters)

(Lim, Collins, Resneck, Bolognia, Hodge, Rohrer, Van Beek, Margolis, Sober, Weinstock, Nerenz, Begolka & Moyano, 2017:961).

The next section elaborates on the characteristics of a few dermatological disorders. These dermatological disorders were chosen from the table of skin disorders above

(Table 2.1), genetic skin disorders, newly found skin disorders, and globally found common skin disorders.

2.4.1 Acne vulgaris

Acne vulgaris is the most common skin disease treated by dermatologists, and affects 85% of the population at some time in their life (Chiu et al., 2003:897). It is a skin condition that consists of blackheads, whiteheads, red spots, and sometimes deeper lesions called nodules or cysts (Bianchi et al., 2011:19). The appearance and severity of acne fluctuates especially during the menstruation cycle of young women (Bianchi et al., 2011:19). One of the theories about the origin of acne is that it is caused by rising hormone levels, which leads to the production of excess oils, making you more likely to develop acne (MacGill, 2018:1).

Gollnick et al. (2008:279) describe acne as a self-resolving condition that sometimes only lasts for 3-5 years. However, although the disease occurs mostly in adolescence, there are adults that also struggle with acne. Nearly 90% of teenagers have acne, and half of them continue to experience symptoms as adults (Dawson & Dellavalle, 2013:1). One third of adults who have acne admit to feeling embarrassed or self-conscious because of their skin (Chiu et al., 2003:899). Clinicians struggle to successfully treat acne because of its reciprocating nature. Some patients with acne can also be left with a substantial amount of scarring and psychological problems.

2.4.2 Eczema

Eczema is described as a chronic skin disorder characterised by an itchy and inflamed skin that usually occurs together with asthma and hay fever (Tibb Institute, 2009:1). A person with eczema has a chronic dry skin that easily becomes red and sore on different parts of the body (National Eczema Society, 2016:3). In some cases, a discharge may also be present.

Parry (2018:1) states that one in every five children and one in every 12 adults in the United Kingdom suffer from eczema. However, eczema is found everywhere. Research shows that the second layer of the skin, called claudin-1, is reduced in the eczema patient (De Benedetto, Rafaels, McGirt, Ivanov, Georas, Cheadle, Berger, Zhang, Vidyasagar,

Yoshida, Boguniewicz, Hata, Schneider, Hanifin, Gallo, Novak, Weidinger, Beaty, Leung, Barnes & Beck, 2011:1). According to Lewis-Jones (2019:3), filaggrin loss-of-function mutations and the breakdown of skin-barrier function also leads to the development of atopic eczema.

With more than 20% of children affected by eczema, we need the support of the teaching profession more than ever to ensure that every child can achieve his/her full potential (Bhikha-Vallee, 2009:1).

2.4.3 Scabies

Scabies is described as an infectious skin disease that usually occurs in sheep and cattle and also in humans, caused by Sarcoptes scabiei, which dwells under the skin (Random House, 2019:1). According to Bezie et al. (2005), the mite is about 0,3 mm. The female mite lays its eggs under the human skin, whereafter the eggs hatch and move to the surface of the skin. The intense itching is caused by the reaction of the skin to the feces of the mite. The itching sometimes only appears four to six weeks after being infected with the mite. “With subsequent infections, the itchiness will begin within hours of picking up the first mite” (Farlex, 2019:1).

2.4.4 Impetiginised eczema

Impetiginised eczema is a secondary infection, sometimes caused by staphlococcus aureus or streptococcal isolates, that can occur in patients with atopic eczema due to the broken skin caused by scratching (Bianchi et al., 2011:42). It occurs mostly in childhood. When an individual has a history of atopic eczema, erythema, and rash, it is likely that they will be diagnosed with impetiginised eczema. Papules and crust will appear on the skin and can get worse even if the individual is using standard treatment for eczema (Bianchi et al., 2011:35).

2.4.5 Atopy

Atopy refers to an inherited predisposition to eczema, asthma, or hay fever. Atopic individuals may have one or all these conditions (Farlex, 2019:1). Atopic eczema usually starts between 3 and 12 months of age. In 90% of people, it clears up during puberty. In

an acute reaction, the signs are inflammation, heat, erythema, and swelling. The individual will itch but does not have pain (Bianchi et al., 2011:32).

2.4.6 Chickenpox/Varicella zoster

The varicella zoster virus causes chickenpox and shingles (Bianchi et al., 2011:38). Chickenpox commonly occurs in childhood before the age of 10. The individual may be immune to chickenpox, but the virus can return as shingles (Bianchi et al., 2011:31).

2.4.7 Henoch-Schönlein purpura

Henoch-Schönlein purpura, also known as anaphylactoid purpura, is a form of vasculitis (inflammation of the small blood vessels) in the skin and other body tissue (Bianchi et al., 2011:40). Respiratory tract infection, mostly caused by ß-haemolytic streptococci, is one of the symptoms that appear most of the time. Other possible causes include drugs, food, and various infections. It occurs mainly in children under the age of 10, and sometimes also in adults (Bianchi et al., 2011:33).

2.4.8 Dermatitis

Dermatitis is the most common skin disease in internal medicine (Cole, 2019:1). It was proven to be the greatest global burden of the skin diseases in 2013 (Karimkhani, Dellavalle, Coffeng, Flohr, Hay, Langan, Nsoesie, Ferrari, Erskine, Silverberg, Vos & Naghavi, 2017:409). The most important area for medicine would therefore be the treatment of dermatitis.

2.4.9 Allergic contact dermatitis

Contact allergy means that somebody is allergic to something that might not affect other people. Most people develop an itchy rash after being in contact with the object/subject that they are allergic to (Nall, 2018:1). The affected area becomes itchy, red, and swollen. These swollen areas are also called water bubbles.

Metals, and perfumes are some of the allergens that causes contact allergy (Nall, 2018:1). If a person has an allergy to a certain substance, he/she might not be able to work in that environment. Learners with allergic dermatitis should thus not choose careers or participate in a sport where they will be exposed to the allergen.

2.4.10 Atopic dermatitis

Atopic dermatitis is one of the four most common chronic inflammatory skin disorders (Lakhani, Prakash, Tiwari, Purohit, Paliwal, Mathur & Bhargava, 2016:89). It is most common among infants and children, and affects about 10–15% of the population. According to Abuabara, Margolis, and Langan (2017:291), 60% of children develop atopic dermatitis in the first year of life and 85% within the first five years of life. About 40% of children with atopic dermatitis outgrows it. In some cases, it appears in adulthood as hand dermatitis.

Essentially atopic dermatitis is a genetic disorder influenced by the environment. This is why it is also described as an exaggerated cutaneous immune response to environmental antigens. The allergens frequently responsible for atopic dermatitis are derived from the house dust mite (Omar, Patimah & Ruzliza, 2012:4). It is difficult to treat and causes immense frustration.

2.4.11 Psoriasis

“Psoriasis is a chronic inflammatory papulosquamous disorder characterized by erythematous plaques with superimposed silvery white adherent scales” (Lakhani et al, 2016:90). Psoriatic lesions, depending on its severity, can be uncomfortable, itchy, and disfiguring. The specific functional changes of psoriasis are unknown but the abnormal inflammatory response of the skin associated with the rapid separation and increase of the epidermis are involved (Kabat-Zinn, Wheeler, Light, Skillings, Scharf, Cropley, Hosmer & Bernhard, 1998:625).

2.4.12 Cellulitis

“This is an infection of the subcutaneous tissues most commonly caused by a group A, C or ß-haemolitic streptococcus. It usually affects a lower limb but can occur anywhere on the body” (Bianchi et al., 2011:27). It is common in older people but can be seen in all age groups. “There is usually an obvious portal of entry for the organism such as a leg ulcer, tinea pedis between the toes (athlete’s foot), eczema on the feet or legs or an insect bite” (Bianchi et al., 2011:27). “The area will be erythematous and oedematous with localised pain and restricted mobility. Blisters may be present with areas of skin necrosis. The patient may also have systemic symptoms such as fever, malaise, chills or possibly

rigors" (Bianchi et al., 2011:27). In comparison to other skin diseases, cellulitis causes an intermediate global burden. It also experienced the greatest decline from 2005 to 2013 and showed a significant change or decrease in estimated deaths (Karimkhani et al., 2017:409).

2.4.13 Urticaria (acute)

Urticaria is characterised by leaking blood vessels and swelling of the exposed area (Bianchi et al., 2011:53). It is caused by chemicals like histamine being released from the mast cells in the skin. Both children and adults are affected by this disorder, whereby red or white wheals form on the affected itching area skin. The lesions usually disappear spontaneously (Bianchi et al., 2011:53).

2.4.14 Pruritus

A person who scratches without any visible form of skin disease most likely has pruritis. Anemia, body lice, HIV, psychological and thyroid diseases are just a few of the causes of pruritis (Bianchi et al., 2011:51).

2.4.15 Genetic skin diseases

Five of the genetic skin diseases identified by Clark (2010) are Darrier-white disease, Epidermolysis-bulloso, Lamellar ichthyosis, Cutaneous porphyria, Malde-Maleda, and Palmaris et Plantaris. Darrier-White disease is an abnormal hardening of the skin cells on the outer layer of skin called keratinisation. A person with epidermolysis-bulloso has a heightened blister response. Lamellar Ichtyosis causes thick scales on the skin. People with Cutaneous porphyria have a lack of heme, and accumulate porphyrins shows signs of photosensitivity. Malde-Maleda is a variation of keratosis (Clark, 2010:1). Palmaris et Plantaris is a skin-thickening disease of the palms of hands and the soles (Clark, 2010:1).

2.4.16 Senile Purpura

Senile Purpura is the bruised skin that is prevalent amongst older people whose blood vessels break because their skin is thinner than when they were younger. It usually appears on the forearms. Healing takes longer because of their age. The prevalence of senile purpura is 10% amongst the elderly (Cho, Kim, Yeo, Choi, Seo, Yoon & Ching, 2014:472).

2.4.17 Oudtshoorn skin

A study done in the mid-1980's highlighted a skin disorder that occurred in people in Oudtshoorn in South-Africa. Keratolytic Winter Erythema, also known as KWE, is a genetic skin disease that affects the palms and the soles. It's also referred to as Oudtshoorn skin because many people with the condition were living in this town in the Western-Cape of South-Africa (Ramsay & Ngcungcu, 2017:1). Research has shown that it is caused by an overproduction of cathepsin B (Ramsay & Ngcungcu, 2017:2).

2.4.18 Vitiligo

Vitiligo is a skin disorder that causes the lightening of the skin in the form of white patches (Lakhani et al., 2016:92). Skin disorders like vitiligo can negatively affect the self-esteem of people (British Association of Dermatologists, 2020:1).

2.4.19 Newly described dermatological disorders

In an article by Gönül, Cemil, Keseroglu and Akis (2014:1), 14 new dermatological disorders were discussed and classified into four categories namely syndromes, tumors, keratinisation disorders, and unclassified diseases.

Pyoderma Gangrenosum, Acne, and Hydradenesis Suppurativa (PASH) Syndrome are described as auto-inflammatory syndromes. The symptoms found in patients with PASH were severe cystic acne on face and back, draining sinus and abscesses in both axillae, crusted ulcers, hemorrhagic scarring plaques, multiple depressed scars, multiple inflammatory scars, keloidal scars in the axillae, groin, and abdomen. Deep scars from cystic acne in the teenage years were also identified in one of the patients (Gönül et al., 2014:7).

Acquired reactive digital fibroma is an uncommon, benign tumor of the digit (Gönül et al., 2014:8). It usually occurs on the toe or thumb, with no signs of fever, weight loss, or malaise. It mostly appears in the dermis and subcutaneous fat (Gönül et al., 2014:8).

An unclassified disorder named saurian papulosis appears as flat-topped polygonal papules on the body except the face palms and soles (Gönül et al., 2014:10). It looks like lizard, crocodile, and dinosaur's skin. These skin eruptions can appear from after birth to 14 years old and can cover most of the skin. The eruptions can be flesh-coloured, red,

flat-topped, discrete polygonal papules, fine scaled, and from 2 mm to 1 cm in size (Gönül et al., 2014:10).

The existence of almost 2 000 skin diseases with different characteristics calls for serious intervention in the awareness, treatment, prevention, and research of skin diseases and its effect on learners' academic progress.

2.5 TREATMENT OF CHRONIC DERMATOLOGICAL DISORDERS

Katayama et al. (2014:386) identified three steps in the treatment of people with chronic dermatological disorders namely diagnosis, assessment of cutaneous symptoms, and finally treatment. Only once an accurate diagnosis and assessment of the symptoms have been made, can treatment commence. The actual treatment is divided into three steps: correction, skin care, and pharmaco-therapy (Katyama et al., 2014:385). Different types of treatment are available and depend on the severity of the skin disorder.

2.5.1 Topical therapy

Brind'Armour (2016:1) suggests that a chronic dermatological disorder can be treated with ointments, cream, sprays, and gels that can be applied directly to the skin. Some doctors and dermatologists also prescribe steroid ointments and topical coal tar products. For scabies, several types of lotions (usually containing 5% permethrin) can be applied to the body and left on for 12-24 hours. One topical application is usually sufficient, although the scabicide may be reapplied after a week if mites remain. Itching can also be lessened by using calamine lotion or antihistamine medications (Farlex, 2019:1). In addition to topical medications, the doctor may prescribe oral ivermectin, which is safe and just as effective as topical medications for treating scabies. The use of ivermectin is also safe for people with a compromised immune system (Farlex, 2019:1).

Topical antihistamines may be used for pruritis, but they may cause allergic contact dermatitis. Cyclosporin is a very effective treatment for atopic dermatitis in children and adults, with side effects like hypertension, renal toxicity, and possible propensity. Additionally, certain types of itch respond better to a particular treatment than others. For example, pruritus related to dry skin will likely respond best to topical treatment with emollients.

2.5.2 Systematic therapy

Systematic anti-inflammatory therapy is a fixed plan of anti-inflammatory drugs that doctors normally prescribe for patients with atopic dermatitis. Topical corticosteroids are the mainstay of conventional therapy for atopic dermatitis and may be used in conjunction with topical antibiotics. Some people may be allergic to the corticosteroids and it can exacerbate the existing dermatological disorder. The dermatologist must thus choose the potency, concentration, and vehicle of topical corticosteroids. However, while systemic corticosteroids are very effective for severe, acute flares of atopic dermatitis, their repeated use may lead to side effects (DermNet New Zealand, 2016:1).

Topical corticosteroids in the form of a cream helps the skin become tighter and treats inflammation. Skin infections caused by immunosuppression can be treated by oral immunosuppressive therapy, especially when topical corticosteroids are not effective. Cyclosporine is a short-term immunosuppressive treatment for adults and children with psoriasis that can be administered orally or as an injection.

Ultraviolet treatment or light is another treatment that can be used to reduce inflammation of the skin when topical treatment does not work. Dupilumab is a breakthrough drug for atopic dermatitis. A combination of immunosuppressive treatment and topical treatment is best suited to treat skin diseases. The effectiveness of systematic treatment has to be determined by doing more research (Megna, Napolitano, Patruno, Villani, Balato, Monfrecola, Ayala & Balato, 2017:1).

2.5.3 Skin surgery

Skin cancer, warts, and boils can also be treated with the help of surgery. Different skin surgeries include skin biopsy, wound closure (flaps), skin grafting, Mohs microscopically controlled excision for difficult skin cancers, cryotherapy (liquid nitrogen), and subcision (DermNet New Zealand, 2002:1).

2.5.4 Phototherapy

The three focus areas for treating psoriasis are: modifying the epidermal differentiation, slowing the growth of skin cells, and lessening inflammation (Kabat-Zinn, Wheeler, Light, Skillings, Scharf, Cropley, Hosmer & Bernhard, 1998:625). The treatment depends on

how severe the patient's skin disease is. Patients who have severe psoriasis and has built up a resistance against treatment can make use of phototherapy, which uses ultraviolet B irradiation (UVB), or photochemotherapy, which uses psoralen (methoxsalen) in combination with ultraviolet A irradiation (PUVA). The aim of both treatments is not to cure the disease but to slow down the spread of the disease. "Other light-sensitive mechanisms may also play a role" (Kabat-Zinn et al., 1998:625).

Phototherapy is especially helpful for atopic dermatitis that is unresponsive to topical treatment. Researchers suggest that UVA and UVAB combined is more effective than UVB alone. UVA-1 can also be used for people with severe atopic dermatitis (Hönigsmann, 2012:19). However, high doses of UVA-1 should not be used on children because the long-term effects have not been investigated (Hönigsmann, 2012:19).

2.5.5 Photodynamic therapy

According to the American Cancer Society, photodynamic therapy is a treatment that uses photosensitising agents that produces a form of oxygen that kills cancer cells when exposed to a specific wavelength of light (Hönigsmann, 2012:20). Photodynamic therapy was also successfully used by Dougherty and partners in 1978 to treat patients with malignant tumours. However, the fact that it sensitised the whole skin for the period that it was used, led to others like Kennedy Pottier and Pross applying the therapy only to the desired area (Hönigsmann, 2012:20).

2.5.6 Cutaneous laser therapy

To uphold protocol, a proper scar classification is needed before laser treatment is advised. Atrophic scars or dermal depressions are often caused by collagen destruction in people with skin diseases such as cystic acne or varicella (Tanzi & Alster, 2004:4). The 1329nm Neodymium:Yttrium-Aluminum-Garnet (Nd:YAG) and 1459nm diode laser are the lasers used to treat atrophic facial scars. It cools the skin by directing wave lengths at the water-containing tissue. This procedure leads to a thermal injury in the dermis but does not damage the epidermis.

The suggested number of treatments is three consecutive monthly treatments, and improvement is noticeable between three and six months after the last treatment. An

improvement of 40–45% is possible by using these lasers to treat skin scars. Exploratory studies predict that the treatment of acne and, potentially, acne scarring can be successful (Tanzi & Alster, 2004:6-7).

2.5.7 Radiotherapy

During external radiation treatment of a cancerous tumor, high-energy rays are directed into the tumor from outside the body. The number of treatments depend on the type, size, and location of the cancer. It also depends on the patient's general health and whether the patient is undergoing any other treatments. Healthy skin can also be damaged by the radiation treatment (Gallagher, 2019:5).

2.5.8 General treatment

Research done on the treatment of psoriasis vulgaris, and atopic dermatitis showed that hospitalisation for up to a period of three months improved the quality of life and severity of the disease (Schmitt, Heese, Wozel & Meurer, 2007:1).

The care for people with dermatitis should be interdisciplinary, which would include immunology, dermatology, allergy, and nursing. People with dermatological disorders are advised to:

- wear light clothes
- wash regularly
- moisturise their skin directly after showering, which will help retaining moisture from bath/shower
- wear cotton clothing
- limit their time in the shower
- bathe or shower in cool or lukewarm water rather than hot water (which can be drying)
- use mild cleansers
- use low pH cleansers and moisturisers
- avoid using cleanser containing alcohol
- use a humidifier in winter
- avoid sudden changes in environmental humidity

- avoid hot or spicy food, avoid alcoholic beverages in the heat (Yosipovitch & Hundley, 2004:327).

2.6 THE IMPACT OF CHRONIC DERMATOLOGICAL DISORDERS ON ADOLESCENT LEARNERS

Although chronic dermatological disorders are not fatal, it can lead to skin damage, secondary infections, sleep disorders in children and parents, reduced quality of life, high costs, loss of confidence, and reduced functional capacity, which can interfere with physical activities and social relationships (Kalmarzi, Ataee, Homagostar, Tajik, Shekari, Roshani, Dana & Nili, 2016:1206). Bezie et al. (2005:1) also state that it leads to misery and incapacitates the patient. Chronic morbidity, agony because of stigma attached to chronic skin disorders, low self-esteem, varying degrees of disability, unproductiveness, and poverty are just some of the incapacities that Bezie et al. (2005:1) highlight**.**

2.6.1 Social isolation

Skin problems are one of a few conditions that Evans (2003:93) mentions that negatively influences the quality of life. According to Evans (2003:93), the fact that a person with skin problems is overweight, could be the result of such a person refraining from being seen in public places like gyms. If learners with chronic dermatological disorders do not want to be seen in public places like gyms, a public place like school could also be threatening to them.

2.6.2 Absenteeism

In addition, an overweight or underweight problem caused by skin disorders or vice versa could lead to absenteeism, which will eventually cause learners to not reach their full potential or drop out of school. Shaw and McCabe (2007:74) describe chronic absenteeism as learners who are absent for about sixteen days per year, whereas an ordinary healthy learner will be absent for about three days per year. In a South African context, being absent for one day would mean missing six to seven different lessons for the day. Being absent for sixteen days would mean extra work and added stress for the affected learner. Without support from teachers and parents, absenteeism will impact learner’s academic performance negatively.

2.6.3 Inability to cope mentally

The recurrence of chronic dermatological disorders over an extended period can lead to fatigued learners. These learners struggle at school because of sleepless nights. If learners with chronic dermatological disorders are regularly absent from school, it could result in poor academic functioning (Shaw & McCabe, 2007:76).

Some of the treatments have harmful effects on the learner. “Pain, fatigue, nausea or lethargy resulting from the illness and/or treatment may seriously limit the child’s ability to focus on academics” (Shaw & McCabe, 2007:78). When learners are tired and cannot concentrate, they could also become despondent.

Another consequence of dermatological disorders is social isolation, which is a result of the inability to cope mentally (Katyama et al., 2014:383). When patients are ashamed and embarrassed about their skin, they do not take part in social activities like sport. Physical and sexual unattractiveness, helplessness, anger, and frustration are some of the feelings that they might experience (Barankin & DeKoven, 2002:715). In fact, the response of most patients with acne, psoriasis, and facial conditions is to become depressed (Barankin & DeKoven, 2002:713).

The issues that the learners with chronic skin disorders experience in class are self-consciousness, which leads to a lack of communication between learners and teachers, as well as between learners and peers. Absenteeism and weight problems were some of the consequences of chronic skin disorders observed by the researcher. Chronic dermatological disorders thus have a physical and a psychological impact on adolescent learners, which could affect their academic performance. Consequently, this study will focus on specific barriers such as withdrawal from social interaction, disciplinary problems, lack of concentration, and a lack of communication between the learner and the teacher as well as between learners and peers**.**

2.7 CONCLUSION

There are more than 2 000 chronic dermatological disorders worldwide, and according to research, poor hygiene, climate and overcrowding, genetics, stress, puberty, and poverty

are some of the causes. The American Academy of Dermatology's classifies these disorders into 24 different categories.

There are many progressions in the field of dermatological disorders. The use of non-descriptive coding to protect the identity and privacy of patients with dermatological disorders is commendable. The treatment of dermatological disorders is continuously developing, and some dermatologists even utilize an interdisciplinary approach to treat patients. Regardless, dermatological disorders are still disturbing to learners on a physical and psychological level. This chapter thus highlighted the importance of addressing the causes of chronic dermatological disorders.

CHAPTER 3

LEARNERS WITH CHRONIC DERMATOLOGICAL DISORDERS IN THE TEACHING AND LEARNING ENVIRONMENT

3.1 INTRODUCTION

The purpose of this chapter is to investigate how learners with chronic dermatological disorders are accommodated in South African schools. For this reason, the focus will be on the role of the Department of Education, teachers, parents in ensuring effective learning for learners with chronic dermatological disorders. The cooperation between the Department of Education, teachers and parents will also be discussed.

Furthermore, the chapter will highlight the available policies regarding inclusion and disabilities, full-service schools as a strategy to enhance inclusion, the present state and progress of inclusive schools, as well as suggestions for the future use and implementation of inclusive education. Finally, this chapter will explore the skills required to teach learners with chronic dermatological disorders and chronic dermatological disorders as a learning barrier.

3.2 ACCOMMODATION OF LEARNERS WITH CHRONIC DERMATOLOGICAL DISORDERS

The policies and methods of accommodating learners with chronic dermatological disorders in schools worldwide are addressed in this section. Information about inclusive education policies is easily accessible. However, a limited information on the experiences and accommodation of learners with chronic dermatological disorders in schools exist (Zarah, 2019:1).

A chronic illness is incurable and limits a person's activities (African Child Policy Forum [ACPF], 2011:9). The point where the chronic illness results in functional limitation, is seen as a disability (ACPF, 2011:9). Functional impairment and limited physical activity are present in some learners with dermatological disorders. These learners are then categorised as learners with chronic disabilities.

The Department of Education in South Africa and worldwide have policies and plans to accommodate learners with chronic and disabling health conditions. Education for All, an organisation led by the United Nations Educational Scientific and Cultural Organization, is aiming to provide quality basic education to all children, youth, and adults (Hasan, Halder & Debnath, 2018:605). To accomplish this initiative, six specific goals are proposed, namely:

- provision and expansion of early childhood education
- provision of free and compulsory education for all children of school-going age
- provision of learning and life-skills programme for adults
- improvement of the adult literacy by 50% by the year 2015
- elimination of gender inequality in education
- improvement of all aspects of education in order to provide quality education for all (Hasan et al., 2018:606).

The South African Schools Act 19 (SASA) extends the White Paper 1's view of basic education, and describes it as a level of education that covers a period of 10 years up to Grade 9 or the age of 15 (Murungi, 2015:3163). In 2000, 189 countries, including South Africa, renewed their commitment toward reaching these educational ideals by adopting the Millennium Development Goals (Donohue & Bornman, 2014:1).

According to Murungi (2015:3166), inclusive education requires that the framework within which education is delivered is broad enough to accommodate the needs and circumstances of every learner in society equally. The Dakar Framework holds the same view, which is that education must neither exclude nor discriminate (Murungi, 2015:3166).

To evaluate to what degree South Africa accommodates every learner's needs and circumstances in the mainstream educational system, it is important to also study other countries.

3.2.1 America

The aim of the "No Child Left Behind Act of 2001" is to improve the education of learners, meet high educational standards, and get learners tested in reading and mathematics in

grade 3-8 and once in high school. However, it was only after discovering that all learners are not performing well due to disability, language, and economic status that the United States had to look at clearly defined goals for individual learners (Hossain, 2012:6).

Section 504 of the Rehabilitation Act of 1973 (Public Law 93–112) and the Americans with Disabilities Act of 1990 (Public Law 101-336) are acts intended to protect learners with disabilities that are not covered by the definitions under the Individuals with Disabilities Education Act (IDEA) statutes. It protects learners with transmittable disabilities, temporary disabilities caused by accidents, and allergies, asthma, or environmental illness (Hossain, 2012:5). The environment and allergies are common causes of skin disorders, which means that learners with skin disorders are protected by section 504.

American schools have achieved a substantial level of success in implementing equal education for all, with more than 75% of learners with a disability sharing classrooms with learners without a disability (Hossain, 2012:3). In America, most of the learners with disabilities are attending mainstream schools and special education has become a service rather than a school for learners with disabilities. Inclusion is a philosophy of education that integrates learners with disabilities into an educational setting where learning can take place. Each learner, who is seen as a valued member of the school, takes part in educational and extracurricular activities. Additionally, learners with and without disabilities receive help when needed.

The Education for All Handicapped Children Act (EAHCA) was the first act that protected learners with disabilities against discrimination. However, the Individuals with Disabilities Education Act replaced the ECHCA and enhanced the plea for no discrimination against learners with disabilities in America. The process of inclusion is being described as a work in progress (Hossain, 2012:1). Hossain argues that the effectiveness of special education and inclusive practices are being disputed even in the twenty first century (Hossain, 2012:2).

3.2.2 Europe

As in South Africa and America, some European countries are also in the process of implementing inclusive education. Although Article 24 of the UN Convention on the Rights of Persons with Disabilities (UNCRPD) expects states to allow learners with disabilities equal and inclusive primary and secondary education, the separate schooling for children with disabilities is still being practiced in many European countries (Council of Europe, 2017:7). Learners with disabilities in Europe are excluded from public schools. Refugee children, minority children, and learners with disabilities rarely attend pre-schools because of a lack of access and a lesser chance of being accepted in public schools. They therefore have a lower quality of education (Council of Europe, 2017:12).

Separate development of education, health, and disability practices are some of the main challenges to a fully inclusive system in France. The Social Affairs Commission report of July 2002 stated that one fourth of the children and young people with physical disabilities, as well as 8% of children with a sensory disability, did not attend school. The inaccessibility to public transport, buildings, workplaces, and schools were also criticised in this report (Tuswa, 2016:24).

The restructuring towards inclusive education in Germany started after the ratification of the United Nations at the Disability conference in 2009. Germany made a constructive effort to create an educational environment where discrimination, exclusion, and learning barriers were reduced and the differences of learners were used as resources for learning. The inclusion of learners with disabilities in regular schools is not fully implemented but a general cooperation and acceptance of learners' rights has been agreed on. While learners with disabilities have the right to go to regular schools, regular schools have the right to refuse intake of learners with disabilities if they don't have the necessary equipment or staff to accommodate that learner (Wingenfeld, 2016:1).

3.2.3 Russia

According to official statistics, Russia has about 10 million people with disabilities (Tsivilskaya, 2016:213). Consequently, the Russian Federation State Programme planned to increase the amount of regional and municipal educational institutions that will be accessible to learners with disabilities by 2016 (Tsivilskaya, 2016:213). A few

suggestions were made after a study in the Republic of Tartastan. These suggestions included involving permanent support from assistant tutors, organising individual learning plans for learners with restricted abilities, and supporting the educational process with psycho-pedagogical correction of cognitive and other problems of children with restricted abilities. According to Tsivilskaya (2016:216), the general educational system should be more tolerant towards learners with disabilities and provide equal learning opportunities for all learners.

3.2.4 Australia

Australia also aims to include learners with disabilities in mainstream schools. UNESCO advocates the idea of identifying the barriers and obstacle that learners experience in the process of trying to be admitted to opportunities for quality education and that education or schools should be accessible to everyone (UNESCO, 2001:18).

In Australia, teachers must include learners with disabilities as it is part of the Australian Professional Standards for Teachers (The Australian Research Alliance for Children and Youth, 2013:14). They are also required to understand the legislation about teaching learners with disabilities and support the inclusive participation and engagement of learners with disabilities (The Australian Research Alliance for Children and Youth, 2013:14). Additionally, Australian schools must comply with the Disability Standards for Education of 2005, which helps them understand their responsibilities under the Disability Discrimination Act (The Australian Research Alliance for Children and Youth, 2013:20).

3.3 LEGISLATION AND STRATEGIES SUPPORTING INCLUSIVE EDUCATION IN SOUTH AFRICA

Before 1994, the education of learners with disabilities in South Africa was determined by the previous socio-economic policies, which excluded certain marginalised groups (such as some learners with disabilities) from educational opportunities (Tugli, Zungu, Ramakuela, Goon & Anyanwu, 2013:1). Most services provided by the Nationalist government for learners with disabilities were reserved for white learners. Additionally, urban areas had more services for learners with disabilities than rural areas. Children with disabilities were seen as helpless and sick and did not have the same opportunities as learners without disabilities. Consequently, they remained poor (ACPF, 2011:11).

After 1994, the South African government aimed to redress these inequalities by allocating resources to health, social services, and education. A social grant system was implemented to address poverty, and the care dependency grant was allocated to caretakers of children with disabilities. However, children had to undergo a medical assessment before the grant was approved. According to ACPF (2011:16), almost 100 000 learners with disabilities were benefiting from the grant.

Additionally, the national government developed policies to ensure equal education, and it was the provinces' responsibility to implement these policies. However, the national and provincial government sometimes share the responsibilities for health, education, and social services (ACPF, 2011:1). The South African Constitution and Bill of Rights, National Education Policy Act (No 27 1996), South African Schools Act (No 84 of 1996), White Paper on Early Childhood Development 2001, Education White Paper 6, and Education White Paper 1 on Education and Training (1995) are some of the acts and policies that support inclusive education in South Africa.

3.3.1 South African Constitution

The South African Constitution is the foundation for all South African policies. It supports the right to basic education, not to be unfairly discriminated against, life and integrity, privacy, freedom and access to information, freedom of conscience, religion, thought, belief and opinion, freedom of association, a safe environment, and of the best interest of the child (Majoko & Phasha, 2018:42).

3.3.2 National Education Policy Act

The National Education Policy Act (No 27 1996) was promulgated to redress the educational inequalities of the discriminatory apartheid government (Majoko & Phasha, 2018:43). The aim is that all children are included, have equal opportunities, and are placed in a school.

3.3.3 South African Schools Act

The South African Schools Act (No 84 of 1996) consists of seven chapters namely definitions and application of act, learners, public schools, funding of public schools,

independent schools, transitional provisions, and general provisions. The chapter about learners consists of the following divisions:

- Compulsory attendance
- Exemption from compulsory attendance
- Admission to public schools
- Language policy of public schools
- Curriculum and assessment
- Freedom of conscience and religion at public schools
- Code of conduct
- Suspension and expulsion from school
- Prohibition of corporal punishment
- Prohibition of initiation practices
- Representative council of learners

The divisions of the chapter are aimed at protecting the rights of all learners including the learners with disabilities (Majoko & Phasha, 2018:44).

3.3.4 White Paper on Early Childhood Development 2001

The White Paper on Early Childhood Development 2001 focuses on the promotion and accessibility of school for children up to the age of nine. Education White Paper 1 on Education and Training (1995) acknowledges the importance of responding effectively to the unsatisfactory educational experiences of learners with special educational needs and including those whose educational needs were inadequately accommodated within the mainstream (Department of Education, 2001:12).

3.3.5 National Commission on Special Needs in Education and Training and National Committee on Education Support Services

The National Commission on Special Needs in Education and Training and the National Committee on Education Support Services were appointed by the Ministry of Education in October 1996 to address and make recommendations for all aspects of special needs. A report with findings from the two bodies was presented to the Minister in November 1997, and a final report was published in February 1998.

3.3.6 Education White Paper 6

The Education White Paper 6 (EWP6) was implemented to address the different learning needs in education and training. It provides an outline of an inclusive education and training system, as well as a framework and steps to be taken to implement it (DoE, 2001:5). It also outlines the Ministry of Education's commitment to providing educational opportunities for those learners who experience or have experienced barriers to learning and development or have dropped out of learning because of the inability of the education and training system to accommodate their learning needs.

In Education White Paper 6, inclusive education is defined as the acknowledgment that:

- All children and youth can learn and need support.
- All educational structures, systems, and learning methods meet the needs of the learners and shows respect towards age, gender, class, language ethnicity, HIV, and other infectious diseases.
- Learning takes place at home, in the community, and within formal and informal structures (DoE, 2001:6*)*.

The Department of Education aimed to implement inclusive education by turning mainstream schools into full-service schools that attend to the needs of learners with or without disabilities by 2020 (DoE, 2016:134). The DoE identified 500 out of 20 000 primary schools to transform into full-service schools and started with 30 schools that are part of the national district development programme (DoE, 2001:8).

3.3.7 Screening, Identification, Assessment and Support Policy

The Department of Basic Education issued the Screening, Identification, Assessment and Support Policy (SIAS) in 2014. The aim is to provide a framework with standard procedures to identify, assess, and provide programmes for learners who require additional support to enhance their participation and inclusion in school. The policy aims to provide quality education for vulnerable learners who experience barriers to education in normal and special schools. The barriers include family disruptions, language, poverty, learning difficulties, disability, large classes, and an inflexible curriculum. The SIAS is also

for children who are of compulsory school-going age but have never attended school because of disabilities or barriers to access school.

The SIAS consists of a protocol and set of official forms that teachers on the School-Based Support Teams (SBST) and District-Based Support Teams need to complete. Learners with specific medical conditions, for example severe diabetes, epilepsy, chronic pain, back injuries, and HIV/AIDS, may also require assessment accommodations. The SBST of a school is responsible for screening and identifying learners, completing application forms, attaching all the relevant supporting documents, forwarding the documentation to the relevant district office, capturing the application electronically, and implementing the decision of the district office (DoE, 2014:9).

3.3.8 Portfolio Committee on Women, Children, Youth and People with Disabilities

The government has established several bodies to monitor violations of rights, particularly those of vulnerable groups such as children with disabilities. They include the Portfolio Committee on Women, Children, Youth and People with Disabilities and the South African Human Rights Commission.

3.3.9 South African Disability Alliance

The South African Disability Alliance (SADA) is a forum consisting of national organisations that promote the rights of people with disabilities. Some of SADA's goals are to raise awareness about disability issues, raise funds for the disability sector, collaborate with role players including the government, and monitor government implementation of services (SADA, 2016:3).

Redressing past inequalities, the right to basic education, respect, inclusion of learners with barriers or disabilities and commitment to an integrated and comprehensive approach to all areas of education are some of the aspects of education that are addressed in South African educational policies.

3.4 SKILLS AND REQUIREMENTS FOR TEACHERS TO IMPLEMENT INCLUSIVE EDUCATION

The framework for inclusive education is built on the Inclusive Pedagogy Approach in Action (IPAA), which states that difference is accounted for as an essential aspect of

human development in any conceptualisation of learning. The second aspect of the IPAA framework states that teachers must believe that they are qualified or capable of teaching all children. Thirdly, teachers need to continually develop creative new ways of working with others (Klibthong & Agbenyega, 2018:110).

The conceptual framework that the learning journey is built on highlights that learning takes place over a period and in collaboration with people. It is an ongoing process that brings about change in the learner. Stepping from one stage in the educational setting to the next, for example pre-school to primary school, is described as crossing borders (Wilder & Lillvist, 2018:694). The interaction between children and their parents, and the influence that it has on the children's beliefs is called the micro-system. Learners who are accepted within the microsystem will easily cross borders. Teachers need to know the curriculum and developmental stages in education in order to understand the learner and ensure that continuity in the curriculum takes place. To make the crossing of borders as smooth as possible for learners, the teacher should find out what the learner already knows.

In this study, Bronfenbenner's different subsystems (the micro-, meso-, exo- and macrosystem) are used as framework for discussing inclusive education (Geldenhuys & Wevers, 2013:3). The interrelation between the school and home is what Bronfenbenner describes as the mesosystem. The macrosystem is the broader cultural world that incorporates the underlying belief systems. It includes political ideology, cultural beliefs, historical events, and government policies (Geldenhuys & Wevers, 2013:5–6). Historical events and government policies like apartheid influence the learning of certain cultural groups in South Africa. Therefore, teachers should be informed about the policies regarding teaching learners with barriers to education and aim to include all learners to avoid the past mistakes of exclusion from education based on aspects like culture or disability.

Teachers and learners should work together towards the successful learning of learners. The teacher-learner relationship forms part of the mesosystem where there is an interaction between school and home or teacher and learner. Watson's (in Jordaan, 2015:2) plea is to include methods for teaching learners with disabilities in the curriculum

for trainee teachers. This suggestion correlates with the IPAA conceptual framework that teachers should believe in their own abilities and be open to learning new methods of teaching learners with disabilities. Teachers that received training in working with learners with disabilities will be able to establish good relationships with learners and parents. The District Support Team should provide illustrative learning programmes, learning support materials, and assessment instruments to teachers that will help them with creativity in teaching and assessments of learning (DoE, 2001:20).

The social model of disability defines disability as a social problem formed by an ability-oriented environment, meaning that the society decides what is a disability or an impairment (Donohue & Bornman, 2014:4). The mindset of everybody involved in school, such as teachers and learners, should change to inclusion. Consequently, contemporary teachers in South Africa are trained to accommodate diverse learners in a single classroom (Oswald & Swart, 2011). Unfortunately, most learners with disabilities are still in special schools or at home. As teachers raise awareness about this issue, the government may be more inclined to allocate resources to this area.

Donohue and Bornman (2014:4) state that older teachers in South Africa are more resistant to inclusion of learners with disabilities in mainstream schools. Young, trained, female teachers were found to be more positive towards inclusion of learners with disabilities (Avramidis & Norwich, 2002:137). Additionally, the type and seriousness of children's disabilities also influence teachers' willingness to accommodate them in class and ability to manage their classroom (Cassady, 2011:1). Cassady also mentions that teachers' attitude towards learners with special needs affects their success and the effectiveness of instruction. The acceptance of learners reveals that continual interactions between the microsystems (mesosystem) results in positive relationships.

3.5 CHRONIC DERMATOLOGICAL DISORDERS AS A BARRIER TO LEARNING

Learning barriers hinder learners from recounting their knowledge and skills when tested and might require flexibility in the methods of assessment (DoE, 2010:13). Some of the barriers that learners with chronic dermatological disorders might encounter are learning difficulties, absenteeism, socio-economic factors influencing their quality of life, lack of knowledge about dermatological disorders, non-support from peers, cultural barriers,

school-level and inadequate policy barriers, lack of parental involvement, and disability. A short discussion of these barriers follows in the paragraphs below.

3.5.1 Learning difficulties

People with eczema, acne, atopic dermatitis, Oudtshoorn skin, skin infections, and many other skin diseases can tempt us to accept that dermatological disorders are normal. However, researchers debate about the chronic state of dermatological disorders. Research done by Thomas et al. (2017:11) suggested that people experience skin infections as normal because it is overshadowed by social issues. However, the pain and discomfort experienced by people with some of these dermatological disorders are real and an indication that it is abnormal and unhealthy.

Dermatological disorders can cause poor health, which could lead to educational setbacks, interference with schooling, and absenteeism. Learners with chronic illnesses may be absent, struggle with concentration, vision, hearing, attention, behaviour, or cognitive skills (Center on Society and Health, 2014:6). A lack of concentration due to discomfort is inevitable and could lead to learning difficulties. Poor health thus leads to lower educational achievement, which in turn delays educational progress.

The National Health Interview Survey indicated that children with disabilities, such as dermatological disorders, experience added burdens like absenteeism as a result of their disabilities. The possibility of children with disabilities being hospitalised were four times more than that of children without disabilities (Newacheck & Halfan, 2014:615). Learners with general disabilities also had considerably longer hospital stays than learners without disabilities (Newacheck & Halfan, 2014:614). Absenteeism can become a learning barrier to learners with chronic dermatological disorders, as it can cause them to fall behind. According to Nguyen, Beroukhim, Danesh, Babikian, Koo, and Leon (2016:391), acne, vitiligo, and psoriasis can also have an impact on the psyche, relationships, life, social outings, and family life of patients. If learners are depressed or have poor relationships with family, friends, or teachers, it can prevent effective learning.

3.5.2 Socio-economic status influencing quality of life

In low-income households, finances can contribute to parents keeping children with disabilities at home. Some parents cannot afford to send their children with disabilities to school because school fees are seen as an added expense to basic expenses like treatment. They would rather spend money on a child that would be able to contribute to the household's finances after school (Donohue & Bornman, 2014:5).

Access to basic services and needs such as proper roads, transport, housing, food, and employment are problems that can have a negative impact on all learners with disabilities (Tuswa, 2016:32-33). Families have the responsibility of paying for transport to treatment facilities, hiring caregivers, treatment, and adapting their home environment (Golics, Basra, Salek, & Finlay, 2013:6). In the case of chronic dermatological disorders where dust mites and dust are causes for allergies, families might need extra money for cleaning services. These expenses place a financial burden on the family.

Family members with chronic dermatological disorders can cause strain at work, as caretakers of children with disabilities who work cannot always concentrate on work because they have to arrange caregivers, transport, and appointments (usually from work). Additionally, one of the parents usually has to sacrifice their work or education to look after the child or attend doctor's appointments. The employment of 40% of family members who take care of learners with chronic dermatological disorders are affected because of the caretaking, attending to hospital appointments and the emotional effects thereof (Golics et al., 2013:7). People or family members of dermatology patients also have to work more hours to support their family financially. Others must make use of state benefits to help with the extra expenses (Golics et al., 2013:6). Disability thus influences the quality of life of the learners and parents.

When a community ignores people with disabilities or is biased towards people with disabilities, discrimination against them will continue (Auxadmin, 2017:1). Learners with physical disabilities using ramps to access public buildings, should be standard procedures. The acceptance of learners with chronic dermatological disorders in public places without being stared at or treated differently, should also be normal practice.

3.5.3 Lack of knowledge about dermatological disorders

Learners with chronic dermatological disorders might be misunderstood by family, friends and teachers because of a lack of knowledge. Peers and siblings are worried about how their lives are impacted and do not understand the learners' predicament. They can also become stressed, angry and feel left out because the learner with the chronic dermatological disorder gets more attention at school and home (Morawska & Mitchell, 2015:2). Additionally, teachers and parents might have difficulty comprehending the extent of the irritation that itching and scratching cause.

Family members of children with disabilities experience different emotions like guilt, anger, worry, frustration, embarrassment despair, loss, and relief. These emotions are sometimes because of a lack of knowledge about chronic dermatological disorders and how to deal with the emotional impact thereof (Golics et al., 2013:8). The family structure is supposed to be the first point of support that learners with barriers or disabilities experience but the incomprehension of the needs of these learners, lack of finances, and other social and economic factors negatively influence them as the primary support of these learners (DoE, 2016:36).

3.5.4 Cultural barriers

Culture has been identified as a barrier to including learners with disabilities into the mainstream schools (Auxadmin, 2017:1). In some cultures, and low-income communities, learners with disabilities are kept at home because they are not valued. People in these communities stigmatise and spread negative beliefs about the learners with disabilities (Auxadmin, 2017:1). Some families are even ashamed of having children with disabilities and would rather keep them at home than exposing them to the outside world. Furthermore, some children with disabilities do not attend school because of the belief that they cannot learn and are disruptive. A person's culture about education will thus determine the parents' decision to send their children with disabilities to school (Donohue & Bornman, 2014:5).

3.5.5 Barriers experienced at school

Resources, or the lack thereof, remains the biggest barrier at schools. There is a shortage of schools in general. According to Donohue and Bornman (2014:1), up to 70% of children

of school-going age with disabilities in South-Africa are out of school. Of those who do attend, most are still in separate, “special” schools for learners with disabilities.

The level of inclusion of learners with disabilities in mainstream schools, as stated by the Education White Paper 6, hasn’t changed in the past 12 years (Donohue & Bornman, 2014:1). It is estimated that only 10% of children with disabilities attend school. The Minister of Basic Education, Angie Motshekga said, “One child excluded is one child too many.” when she spoke about the shortcomings experienced in special needs education in South Africa (Auxadmin, 2017:1).

The Education White Paper 6 was implemented to ensure that the rights of people with disabilities were attended to. However, the policy will only become effective when people apply the policy (Auxadmin, 2017:1). Donohue and Bornman (2014:1) identified the division between a policy and practical plan and the inability to implement it, as a restriction to implement the Education White Paper 6. The general quality of education is critical in South Africa (Donohue & Bornman, 2014:1).

The struggles or barriers preventing the success of UNESCO in schools are ongoing violence, dropout, high teenage pregnancy rates, and decreasing high school graduation rates. The reading and mathematics performance of South African learners are at the bottom level when compared to other African countries (Donohue & Bornman, 2014:2). The problem of overcrowded classrooms should also be taken into consideration, as it hinders effective learning. With overcrowded classrooms it is difficult for learners with chronic dermatological disorders to receive the extra motivation and help that they need.

The organisations responsible for reporting violations of rights have not reported many cases (ACPF, 2011:5). The work of SADA has been unsuccessful because of a lack of funding. In 2018, the National Health Insurance Bill was implemented and gazetted. The aim was to provide quality healthcare for all the citizens of South Africa by running four projects costing about R4,1 billion (SADA, 2018:1). Additional funds will be generated from general taxes, people earning above a certain amount, and monthly contributions made by employees. The National Health Insurance Bill envisions to bridge the gap between healthcare for poor and rich people. The main aim is to provide healthcare for

everyone without having to pay at healthcare facilities or contributing towards medical aid schemes.

3.6 LEARNERS WITH CHRONIC DERMATOLOGICAL DISORDERS ATTENDING A SECONDARY SCHOOL

Learners with chronic dermatological disorders at the Secondary School, as observed by the researcher, are experiencing problems with self-image, discipline, academic performance, and fitting into a peer group. Teachers do not necessarily view chronic dermatological disorders as a debilitating factor that influences learners' behaviour, educational performance, self-image or fitting into a peer group. These learners are expected to perform academically. No special treatment or plan of action, except the SBST, are presently in place for these learners. Furthermore, the researcher is not aware of any collaboration plan between teachers and parents.

The school has a SBST in place but the teachers' workload limits the meeting time. The school has 1 650 learners and 54 teachers. The Grade 8 and 9 classes have 50 to 55 learners per class. The school work on a seven-day cycle and has seven periods per day. Some of the teachers work 47 out of the 49 periods, leaving them with two periods for administrative work. Consequently, some teachers cannot participate in committees because of their workload. These are some of the constraints preventing the SBST from functioning optimally.

In 2019, learners with academic problems at the Secondary School were referred to special schools. However, no learner with a chronic dermatological disorder was referred. The school's Health Committee introduced a general health check-up programme with Grade 8 learners in 2015. The health investigation was done by the local clinic but in 2017 the clinic indicated that the health investigations at schools will be done every third year because of their workload and the number of schools in the area. Consequently, the Health Committee approached the paramedics of the ambulance services to do the learners' BMI and give a talk about fitness and health.

The health screening for Grade 8 learners was on the Health Committee's programme for 2020, but because of COVID-19 the programme was not done as planned. COVID-19

screening and motivational talks to address the emotional health of learners, teachers, and general workers, took the foreground. All the learners that were sick were sent home and had to go to a clinic, doctor, or be healthy before returning to school. Other health issues that are being addressed by the school's Health Committee are HIV/AIDS, teenage pregnancy, tuberculosis, and first aid. Chronic dermatological disorders have never been discussed or mentioned as a topic to be discussed by The Health Committee.

In 2019, the Department of Education appointed a counsellor at the school. The counsellor refers the learners to the district's psychologist or social worker, and organises meetings with parents, where needed. The counsellor is a member of the SBST and the Health Committee. The counsellor is also responsible for training learners as peer counsellors. The presence of the counsellor has brought significant relieve to the teachers and administrative staff who were responsible for the referral of learners before 2019. However, more counsellors are needed for a school of 1 650 learners.

3.7 CONCLUSION

Inclusive education is a very noble concept that has the intent of honouring every learner's right to be educated. Learners in South Africa and in the rest of the world have the right to education. The implementation of inclusive education in different countries is at different levels. All the countries that were discussed are making a concerted effort in implementing inclusive education. The legislations and strategies to support inclusive education in South Africa are in place. Assumptions should not be made about the teachers' knowledge about inclusive education. Teachers should be trained and informed about the requirements expected of them to teach inclusively. The barriers experienced by learners with dermatological disorder from a Secondary school were explored.

Chapter 4 presented the research design and methodology that was used in this research.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

In Chapters 2 and 3, a contextual framework was created by undertaking a literature review on the different chronic dermatological disorders and the role of the Department of Education in ensuring that learners with chronic illnesses, such as dermatological disorders, are protected by law. The debilitating nature of chronic dermatological disorders compelled the Department of Education to put the necessary laws in place to protect the learners with chronic dermatological disorders.

This chapter covered the research approach and design used to explore the experiences of learners with chronic dermatological disorders, their parents, and teachers. An in-depth study of the data capturing methods, analysis, trustworthiness, as well as the ethical procedures that were followed during the research is discussed.

4.2 RATIONALE FOR EMPIRICAL RESEARCH

The main aim of research was to explore the boundaries of the environment in which the problem is likely to reside and identify the prominent factors that might be relevant to the research. The research design and approach were thus chosen with the aim of examining to what extent chronic dermatological disorders influence learning. To do this, this study explored the experiences of learners with chronic dermatological disorders, as well as that of their parents and teachers.

The qualitative empirical study was selected to gain information through indirect observation and the personal experiences of participants. Due to the under-researched nature of the phenomenon, it was necessary to do fieldwork. The fieldwork consisted of observing learners with dermatological disorders during lessons and a parent living with a child who has a chronic dermatological disorder, which should shed light on the extent to which chronic dermatological disorders influence learning.

4.3 RESEARCH DESIGN

The research design refers to the plan and structure of the investigation (Lebona, 2013:101). It describes the methods that are going to be used to collect and analyse data, and how all of this was going to answer the research question. The research design also reflects the purpose of the inquiry, which was characterised as exploratory. Exploratory research can be done on a concept, situation, or population that the researcher knows little about, using an observation, interview, or content analysis. In this under-researched phenomenon, there is a scarcity of information about the influence of chronic dermatological disorders on learning. Exploratory research is thus appropriate in addressing a topic about which there are high levels of uncertainty and ignorance.

Primary data was generated in the form of an exploratory case study, which consisted of interviews with teachers and parents, and questionnaires consisting of open-ended questions to be completed by the learners (Creswell, 2009:165). This allowed the researcher to explore the experiences of the participants with chronic dermatological disorders and parents of children with dermatological disorders. Possible ways in which teachers can help learners with chronic dermatological disorders in the classroom were also investigated. The advantages of using this strategy were that a variety of data collection methods with more than one individual could be utilized (Creswell, 2009:30). The limitations of the case study research included subjectivity and the inability to generalise findings from the small number of participants that were used (Almeida, 2017:379).

For this research, eight Grade 10 and 11 learners completed open-ended questions (Appendix K) about their experiences with chronic dermatological disorders. This gave learners time to think and give an honest account of their experiences. An interview was conducted with a focus group consisting of five teachers. The interview questions were semi-structured and open-ended to allow them to adequately express their experiences and views about learners with chronic dermatological disorders (Appendix M). Additionally, two parents were interviewed about their experiences with children with chronic dermatological disorders. These interview questions were also semi-structured and open-ended.

4.4 RESEARCH PARADIGM

It is complex and almost impossible to categorise all educational and psychological research into a few paradigms. However, Kivunja and Kuyini (2017:30) suggest that the paradigms can be grouped into three main taxonomies: positivism, constructivism/interpretivism, and critical or pragmatic. The research paradigm that was used in this research is the constructivist/interpretivist approach. Interpretivism emphasises that the individual's social reality is viewed and interpreted according to his/her ideological position. The researcher thus hoped to gain access to the reality of learners through social construction such as language, consciousness, shared meanings, and instruments.

The interpretive approach is also based on the idea that social reality is not objective. but rather shaped by human experiences and social contexts. It "assumes that reality as we know it is constructed inter subjectively through the meanings and understandings developed socially and experientially" (Cohen & Crabtree, 2006:1). It should therefore be studied within its socio-historic context and consist of the subjective opinions of the participants. Each learner has different experiences, which means that their experiences with chronic dermatological disorder can be interpreted differently.

Since this study employed interpretivism, the emphasis was on participants' words, actions, feelings, and understanding of what they experience. The researcher summarised the patterns, trends, and themes gathered from the research, and reported the findings. The researcher also used an emphatic approach by stepping into all participants' shoes and seeing the world through their eyes.

4.5 RESEARCH APPROACH

There are three different research approaches namely qualitative, quantitative, and mixed method. Quantitative research is an experimental approach of doing research that uses numbers in data collection as well as analysis (Eyisi, 2016:94). Babbie (2013:389) described qualitative data analysis as assessing observations in a non-numerical manner through participant observation, content analysis, in-depth interviews, and other qualitative research techniques. Lastly, the mixed method approach employs both quantitative and qualitative data collection strategies (Creswell, 2003:22).

The research approach followed in this study is qualitative. Ngugi (2020:8) also describes it as open-ended and useful for studying attitudes, values, beliefs, and behaviours within various social circumstances. Since this study uses interviews and a questionnaire with open-ended questions to collect data about participants' personal experiences with dermatological disorders, the qualitative research approach is most fitting.

One of the prime reasons for conducting a qualitative study is its exploratory nature (Mason, 2002:24). According to Sutton and Austin (2015:226, 227), qualitative research attempts to access the thoughts and feelings of study participants, which is not an easy task since it involves people talking about very personal experiences. Sharing their personal experiences with chronic dermatological disorders will highlight the effect that it has on the learner's emotions, and learning. A limitation of qualitative research in this study was the proximity of the researcher to the participants (Almeida, 2017:371).

4.6 RESEARCH METHODS

Research methods are the strategies used to collect, analyse, and interpret the information. Open-ended questions, interviews, and observation are some of the methods of collecting qualitative data. On the other hand, surveys and experiments are research methods used in quantitative research (Creswell, 2003:14). Different types of analysis include text analysis, theme patterns analysis, statistical and text analysis, across database analysis, statistical analysis, and statistical interpretation (Creswell, 2003:17).

Maree (2016:51) states that it is important to ensure correspondence between the research question and methods. In other words, the type of data you need to answer your research question, will determine the research methods used. The research question was: What challenges do learners with chronic dermatological disorders experience in school? To explore the extent to which chronic dermatological disorders influence learning, learner's, parents, and teachers' experiences with the disorder was the main focus of the study.

4.6.1 Sampling

Qualitative research allows the researcher to make use of a sample of participants instead of the entire population. The target populations for this research were:

- learners
- parents
- teachers

Owing to logistical considerations, it was not possible to study the entire population. It was therefore necessary to select participants in such a way that they represented the population as truthfully as possible. Therefore, class teachers were asked to identify possible learner participants (LP) that meet the following criteria:

- Learners had to have a dermatological disorder. The questionnaire was specifically designed to explore the experiences of learners with chronic dermatological disorders.
- Learners had to be in Grade 10 or 11, as the researcher is a Grade 10 and 11-teacher. This assures an emphatic relationship with participants.
- Learners needed access to a phone or laptop and data to complete the questionnaire electronically.
- Proficient in English.

It is possible that the learners came from different cultural backgrounds, with different home languages. However, the questionnaire used to gather the data was only available in English. Therefore, the learners had to be proficient in English. Both boys and girls who met the criteria were identified as possible participants.

The following criteria were set to select eligible parent participants (PP):

- The parents had to have children with a chronic dermatological disorder because the questions were specifically for parents with children who have chronic dermatological disorders.
- The parents had to be the parents of preferably the Grade 10 or 11 learners participating in the research.
- Access to a cell phone, connectivity, and data were prerequisites, as the interview was performed telephonically.

Parents who met the criteria were contacted telephonically to ask if they are interested in participating in the research. However, only one of the two parents that were identified and selected, was a parent to a learner participant.

The following criteria were set to select teacher participants (TP):

- The teacher had to have experience with dermatological disorders or teaching learners with chronic dermatological disorders in class.
- Must be Grade 10 and 11 teachers.

The teachers were selected purposively, which means that each teacher had to be interested in the topic to form part of this research. They also had to be willing and available to participate in the research (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015:2). The teachers had to be teaching the Grade 10-11 learners of the school. Teachers were informed about the topic of the research and those interested in participating were asked to gather in an allocated room at a specific time.

The choice of the small sample size is based on the view of Brink, et al. (2018:128), which states that in qualitative research, where sampling is done purposively, too many participants would increase the complexity of the analysis process. Purposeful sampling resides on the proposition that information-rich samples are to be selected to have an in-depth view of the phenomena (Gupta, Shaheen & Reddy, 2020:28).

4.6.2 Data collection

The aim of data collection was to gather relative, factual, and honest information from learners, parents, and teachers about chronic dermatological disorders. Methodological triangulation, which is the use of more than one data collection method, was implemented during this research (Noble & Heale, 2019:65). For this case study, two data collection instruments were identified and applied: questionnaires and interviews. The triangulation of data from different sources – learners, parents, and teachers – makes the data gathered more credible and trustworthy (Yin, 2011:9).

4.6.2.1 *Questionnaires*

The researcher used open-ended questions to accumulate information about learners' experience with chronic dermatological disorders. The questionnaires were distributed on google forms and submitted electronically.

The questionnaire explored:

- Daily activities of learners with dermatological disorders.
- Types of chronic dermatological disorders that learners experience.
- The influence of dermatological disorders on schoolwork, behaviour in class, and school attendance.
- The influence of dermatological disorders on social interaction with peers and emotional health.
- Teachers' responses during an onset of the dermatological disorder.
- Support that learners with dermatological disorders receive from parents.
- What parents, teachers, peers, and siblings can do to help learners cope better with their chronic dermatological disorder.
- How learners can give advice to others on how to handle chronic dermatological disorders.
- If the dermatological disorder is hereditary.
- How learners with dermatological disorders experience school.
- The effectiveness of treatments over the years.

4.6.2.2 *Focus group interviews*

For the second category, a focus group interview was conducted with five teachers from the Secondary School. Onwuegbuzie, Dickinson, Leech and Zoran (2009:3) describe focus groups as less threatening to many research participants because the environment allows participants to share ideas, opinions, and thoughts. Onwuegbuzie et al. (2009:3) suggest that the size of a focus group should be between 6 and 12 members to gather enough information but also ensure that everyone in the group has the freedom to share their thoughts.

The focus group interview was conducted in a classroom and the COVID-19 regulations of sanitisation, social distancing, temperature checks, and the absence of COVID-19 symptoms were adhered to.

The teacher interview explored:

- Teachers' experience and knowledge in working with learners with chronic dermatological disorders.
- Teachers' opinion of how learners with dermatological disorders behave in class.
- How teachers perceive the concentration and work ethic of learners with dermatological disorders in class.
- How the teacher can motivate learners with dermatological disorders to learn, complete work, and concentrate in class.
- How to encourage, learners to have a good self-image.
- How to encourage good communication with parents, peers, and teachers.
- How to educate, learners about laws concerning chronic dermatological disorders.

4.6.2.3 *Parent interviews*

The interviews with parents were performed telephonically because no visitors were allowed at school during the COVID-19 pandemic.

The parent interviews explored:

- The types of chronic dermatological disorders that children have.
- The experience of living with children with chronic skin disorders.
- The cooperation between parents, teachers, and learners.
- The treatment of the chronic dermatological disorder.
- The influence that the chronic dermatological disorder has on family life and finances.
- The influence of the dermatological disorder on the learner's learning.
- The expected treatment of their child at school.

4.7 PROCEDURES OF THE INVESTIGATION

The investigative procedure involved two phases: obtaining permission and consent, and fieldwork. The Department of Education was approached for permission to conduct research at the Secondary School, in the South-Western District of the Western-Cape. Then the researcher obtained approval for the research to be conducted from the Research Ethics Committee (College of Education) at the University of South-Africa. After the Department of Education and the Research Ethics Committee of the University of South Africa granted permission, the principal of the Secondary School was approached.

All learners who met the criteria were identified, and the parents and teachers approached for permission to be included in the research. Once the relevant approval, permission, and consent were granted, arrangements were made to administer the questionnaire and conduct the interviews. This was discussed in more detail in section 4.7.1.

4.7.1 Approval, permission, and consent

The Research Ethics Committee (REC) of the College of Education (University of South Africa) approved the research and provided an ethical clearance certificate to continue with the research (Appendix A). Formal requests to conduct the research in the Western Cape were submitted to the Department of Education. Permission was then granted by the Western Cape Department of Education to conduct research in specific schools in the corresponding districts (Appendix B).

A formal written request (Appendix C) was sent to the school principal explaining the nature of the research and asking for their willingness to participate in the study. The correspondence was followed up by a conversation with the principal about the intended research. The principal gave oral permission to conduct the study at the school.

The learners, parents, and teachers were provided with information about the research (Appendices D, E and F). A formal letter requesting the permission of the parents or guardians to include the learner in the research was sent to all parents or guardians (Appendix H). Most parents or guardians provided consent, but some rejected the request, and these learners were therefore not included. The learners who had permission from their parents or guardians were contacted to request their informed

assent for inclusion in the research (Appendix G). Thereafter the questionnaires were circulated to the respondents for completion.

A formal letter (Appendix I) was sent to parents to request permission to participate in the research. Two parents that were approached gave consent to participate in the research.

The five teacher participants received their consent forms (Appendix J), which they completed, signed, and submitted to the researcher. A day before the interviews were to be conducted, one of the teachers was unable to participate due to personal issues. Another teacher was then approached, who signed the permission form and participated in the research.

Throughout the study, ethical measures such as protecting the participants from harm and honouring the participants' right to privacy were considered. No known risks were associated with participation in the study other than the inconvenience of completing the questionnaire and conducting the interview. No individual was disadvantaged by being excluded from participation in the research and confidentiality was ensured and maintained throughout the study. The data and information of individuals were not identified in any way in the research findings.

4.7.2 Fieldwork

The second phase of the investigation involved fieldwork during which one participant group had to complete the questionnaire (Appendix K) electronically, and the remaining two groups were interviewed. The parents were interviewed telephonically (Appendix L), while the teachers were interviewed in a focus group (Appendix M).

4.8 DATA ANALYSIS

There are two approaches to content analysis. They are deductive and inductive. The deductive approach to content analysis is a top-down approach that works with existing framed and theoretically rooted constructs and theories that guide data analysis, whereas the inductive approach is a bottom-up approach that develops constructs and theories, which later might have a link with existing literature.

While paucity of knowledge on a particular phenomenon dictates the usage of the inductive approach, prior knowledge about a phenomenon warrants the use of the deductive approach (Gupta et al., 2020:147). The exploratory nature of the study gave rise to the inductive approach of forming theories rather than working with existing theories. Thus, the inductive approach to content analysis will be used where theories are constructed and linked to the existing literature (Gupta et al., 2020:147).

4.8.1 Questionnaire analysis

The researcher read through the completed questionnaires on a micro level. This was possible due to the small sample of participants. Each participant's response to each of the different questions were examined in detail, and comparisons between the different participants' responses were made and noted. From these answers, the researcher compiled different categories and themes. The researcher used inductive interpretive analysis to clarify what was being said by the participants (Smith & Osborn, 2015:41).

4.8.2 Transcribing interviews with parents and teachers

Firstly, the researcher read the answers to the questions and listened to the audio tapes a few times to form a general idea of the participants' accounts. This first stage of reading helps the researcher to understand the information and recall the atmosphere in which the interview took place (Pietkiewicz & Smith, 2012:366). The researcher listened to the interviews for a second time and wrote down the direct words of the participants. The participants' views were captured in detail through transcription. Finally, the researcher read through the responses to get familiarised with the content. Ponelis (2015:542) describes reading through the transcripts a few times and making notes as the first level of data analysis. During this first stage, detailed notes can be made to highlight the potential issues and experiences.

4.8.3 Coding

The researcher used coding to refine the data obtained. Coding entails reading through the transcribed data with the aim of identifying similar thoughts and ideas and labelling it by using colour or words to group similar ideas or themes. Coding and categorising can start as early as the data collection process (Brink et al., 2018:181).

4.8.4 Categories and themes

According to De Vos et al. (2011:402), the researcher should listen to the words and phrases in the participants' own vocabularies that record the meaning of what they do or say. Therefore, extracts that portray the perspectives and experiences of participants were selected from the interviews and questionnaires. This assured the subjectivity of the themes.

At the third stage, the researcher developed themes from translated transcripts and reflective memos to define them in more detail and group according to similarities. The researcher ended up with themes, sub-themes, and short notes. The researcher then organised the shared themes to relay the meaning and essence of the participants' experience grounded in their own words.

De Vos et al. (2011:418) states that in the final phase, the researcher presents the data in text, tabular, or figure form. A table of the structured themes, together with quotations that illustrate each theme, was designed to allow the researcher to check the connection across emergent themes and find out whether they could be linked back to the participants' experiences.

4.9 VALIDITY AND RELIABILITY OF RESEARCH

In qualitative research, validity and reliability refers to the quality of the research and if the research helped to understand the phenomena that would otherwise be confusing (Bashir, Afzal & Azeem, 2008:39).

4.9.1 Transferability

Transferability refers to how the research can be used in other schools or communities. The researcher wishes to raise awareness about the influence that chronic dermatological

disorders has on learning and share the findings of the research with teachers, parents, and learners from other schools.

4.9.2 Credibility

Credibility refers to the fact that the analysis and findings were derived from the collected data. It also refers to how accurately the data was evaluated. The researcher, as far as possible, documented the data accurately and checked transcripts for correctness as suggested by Brink et al. (2018:158). Additionally, different data collection strategies (like the literature review, questionnaires with learners, and interviews with teachers and parents) were used to ensure that enough information was gathered.

4.9.3 Dependability

Dependability, or reliability, refers to the repeatability of the study. Thus, how can the researcher ensure that similar research will obtain similar results? The researcher was precise in interpreting the information and forming conclusions to ensure that findings by other researchers will result in the same conclusions.

4.9.4 Conformability

All sources of information were not only mentioned, but special efforts were made to ensure that the information used was put as close to the original meaning as possible (when not verbatim). The research procedure was fair, and no learner was obliged to answer questions in a specific manner.

To avoid measuring bias, data was collected using both questionnaires and interviews. This ensured that enough data was gathered, and that the data could be cross verified. By compiling enough data through different methods and from different sources, the researcher ensured that the findings were based on the participants' words and experiences rather than the researcher's biased opinions.

4.10 TRUSTWORTHINESS

Trustworthiness in research refers to honesty, truthfulness, and the ability to rely on the data. Qualitative research is often questioned and therefore trustworthiness is important. According to Tuswa (2016:62), trustworthiness is obtained through testing the data analysis, findings, and conclusions. The objectivity of the researcher during the analysis,

compilation of findings and forming of conclusions will also add to the trustworthiness of the research.

Researchers can be biased in three different areas named sampling, procedures, and measurement. The researcher therefor had to make sure that no one was omitted or excluded from the research. Each person that met the criteria for participation had an equal opportunity to participate in the research. Additionally, the researcher allowed the participants to respond to questions without interference and based findings solely on the responses of participants. Various other strategies, including triangulation, was used in the study to increase trustworthiness and credibility.

4.11 ETHICAL MEASURES

Voluntary participation, permission to do research, anonymity, and dependability are the ethical measures that the researcher considered during this research.

4.11.1 Informed consent

The researcher explained the consent and assent forms to the learners and their parents. All participants (learners, parents, and teachers) were informed about the procedures, benefits, risks, and confidentiality of the study before giving consent. Thus, all participants made informed decisions to participate in the research.

4.11.2 Anonymity and confidentiality

The researcher explained to participants that they will remain anonymous and be addressed only by the codes ascribed to them. Additionally, participants were asked to refrain from mentioning their names or addresses during interviews or on questionnaires to further ensure their anonymity and confidentiality. The researcher furthermore pledged to store the hard copies of the research in a safe place for five years.

4.11.3 Voluntary participation

Voluntary participation means that the participant choses to participate in the research. Nobody was forced to participate in the research. The researcher explained to the participants that participation in the research is voluntarily and that they could withdraw from the research at any time. “It is imperative to comprehend that the participants should be given due freedom in becoming a part of any research” (Gupta et al., 2020:11).

4.11.4 Potential psychological harm

It was possible that learner participants as well as parents had to review anxious, painful or shameful experiences about chronic dermatological disorders (Vlok, 2016:100). The learners who did their questions at home could contact the researcher telephonically or via e-mail, whereas the learners with no data who did the online questionnaires at the school, could talk to the researcher directly. The school counsellor was available should they have experienced any psychological distress.

4.12 CONCLUSION

This chapter focused on why the qualitative research method was the best approach to an exploratory study about the effect of chronic dermatological disorders on learning. The importance of sharing the participants' own views was highlighted, as well as strategies to assure trustworthiness. These include different data collection strategies such as interviews and open-ended questions. Furthermore, the researcher's plans to adhere to the ethicality, trustworthiness, and validity and reliability of the research, including transferability, credibility, dependability, and conformability, were outlined in this chapter. Chapter 5 consists of the analysis of the participants' responses.

CHAPTER 5

EMPIRICAL INVESTIGATION

5.1 INTRODUCTION

The aims of the research were to explore the experiences of learners with chronic dermatological disorders, the experiences of parents with children who have chronic dermatological disorders, and how teachers can assist learners with chronic dermatological disorders. The reason for exploring the topic was to create awareness about the influence of chronic dermatological disorders on learning at a Secondary School and avail this knowledge to other schools in the Western Cape of South Africa. The data collected is presented in this chapter.

5.2 RESEARCH PROCESS

As described in Chapter 4, the researcher approached the principal with a formal letter for permission to do research at the school after receiving the approval letters from the WCED, as well as ethical clearance from the ethical board of UNISA. After receiving these documents, the principal permitted the researcher to start with the research.

The researcher requested all Grade 10 and 11 class teachers to provide a list of learners with chronic dermatological disorders. The learners were then contacted and those who were interested in participating provided the researcher with the telephone numbers of their parents. As explained in Chapter 4, parents were approached to gain permission to conduct research with the learners. Two of the parents with learners with chronic dermatological disorders were also asked to participate in the telephonic interviews, which they agreed to. The researcher obtained a list of teachers from the principal, informed the teachers about the research and five teachers were chosen to participate.

All participants were provided with information sheets and consent forms, and given ample time to decide if they wanted to participate in the research and return the completed forms. Each participant was assigned a code consisting of an abbreviated form of the participant group that they belong to and a number, for example Teacher Participant 1 (TP1). After receiving the completed consent forms from the learner participants, the link

to the questionnaires was provided. The learners completed the questionnaires electronically and consulted the researcher when they could not understand the questions. It became apparent that some learners did not have enough data to complete the questionnaires. However, at this stage (level one of COVID-19) they were allowed back at school and were able to complete the questionnaires there.

The interviews with the parents were conducted telephonically, and they expressed themselves adequately. The timetables of all the teacher participants were compared to find a period where all participants, as well as the researcher, were available for the interview. The focus group interview was conducted in a room at the school. COVID-19 regulations like screening, temperature measurement, social distancing (chairs were 1,5 metres apart from each other), and sanitisation were adhered to. Teachers were also asked to wear their masks.

The interview lasted for 18 minutes and 30 seconds. During the interview the teachers were relaxed and willing to share information. At first, the teachers were hesitant to speak English but with the necessary motivation from the researcher, everybody was able to express themselves clearly. The language in which the interview was going to take place was not part of the criteria, as the researcher assumed that the teachers would be comfortable expressing themselves in English.

5.2.1 Remarks regarding the interviews

During the focus group interview, TP3 only responded to one of the questions, while TP4 described the causes of dermatological disorders in too much detail. Additionally, the distance between the parent and researcher during interviews hampered the probing of all the aspects that had to be examined.

5.2.2 Remarks regarding the questionnaires

Learners were encouraged to contact the researcher if they did not understand a question. Regardless, some of the learners misinterpreted the questions or did not really answer the question. The misinterpretation was linked to a lack of vocabulary in English, which is their second language. An example of this was when asked if their dermatological disorder affected their behaviour in class, and LP8 answered that “sometimes it’s clear”.

The researcher did not follow up on this participant's response. Moreover, the word hereditary was unfamiliar and had to be explained to two of the participants.

5.3 THEMES FROM THE QUESTIONNAIRES AND INTERVIEWS

The main research question was: What challenges do learners with chronic dermatological disorders experience at school? To identify the challenges, the following sub-questions were researched:

- How do chronic dermatological disorders affect learners' learning to the extent that it might become a barrier to learning?
- How do chronic dermatological disorders influence learners' behaviour in class?
- What do parents who have children with chronic dermatological disorders experience?
- What solutions do the Department of Education contribute towards the health and learning concerns of learners with chronic dermatological disorders?
- What measures can teachers take to help learners with chronic dermatological disorders adapt to the classroom?

The questionnaires and interviews were designed to gain information to answer the main research question and sub-questions. The questionnaires were executed electronically and then saved as an excel document, which gave the researcher the opportunity to review the answers of all the participants in a table form. From the table, the researcher could identify the themes. One of the learner participant responses was added to the dissertation as Appendix P.

All interviews (individual and focus group) were recorded. The researcher listened to the interviews several times to accurately capture all the information. All interviews were transcribed. Detailed descriptions were provided, and significant data segments were identified by means of categories and sub-categories, which were then coded into themes and meaningful units (Johnson & Christensen, 2014:186). Transcriptions were added to this document as Appendices N and O.

5.3.1 Questionnaires of learners

Eight learners completed questionnaires. Demographics such as the learner's grade and sex had to be disclosed and questions centred around learners' experiences with their dermatological disorder, the appearance of the skin during the onset of their skin disorder, and how learners felt about their dermatological disorder.

Where learning was concerned, they had to explain the effect of the dermatological disorder on their schoolwork, school attendance, behaviour in class, treatment by teachers, relationships with peers, and whether they think that teachers should know about their dermatological disorder. The learners also had to provide information about the support that they had received from their parents during the onset of the dermatological disorder and how people responded to it. They were also asked what they thought could help them cope better with their chronic dermatological disorder, as well as how they would be able to help other students with chronic dermatological disorders.

The experiences of learners with dermatological conditions, the influence thereof on their learning and behaviour in class, and the support that they received are the different themes that were identified from the questionnaires. These are illustrated in the figure below.

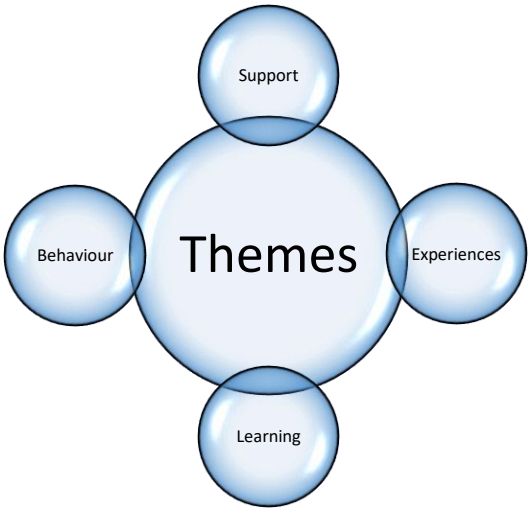

Figure 5.1: Themes developed from questionnaires

Under each theme, the following sub-themes were identified:

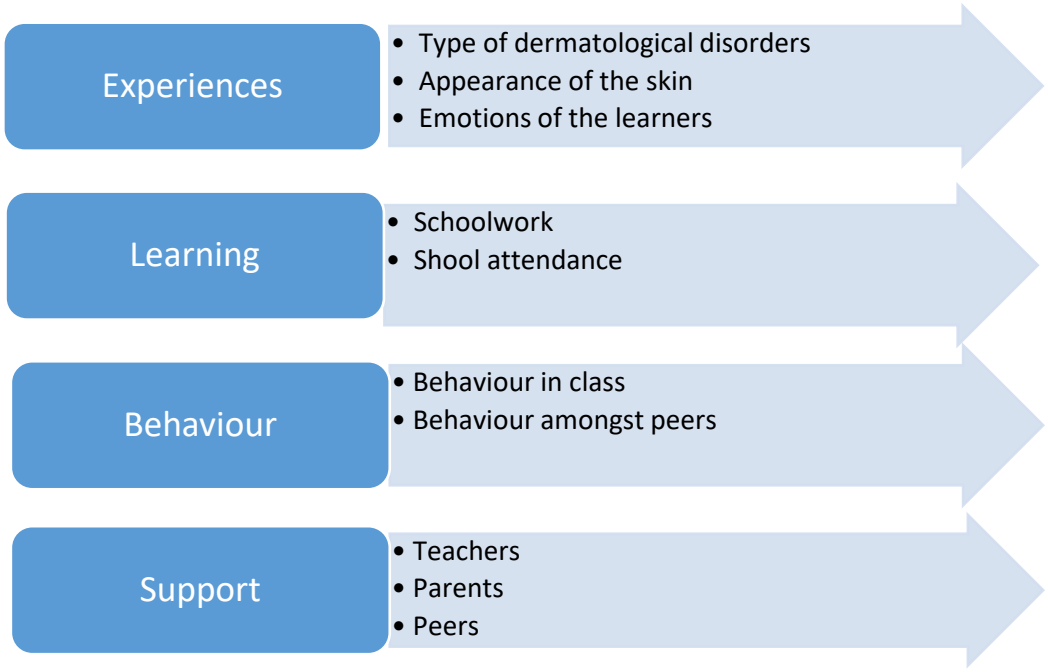

Figure 5.2: Sub-themes identified from questionnaires

5.3.1.1 *Theme 1: Experiences*

The sub-themes that were derived from the first theme (experiences) were the type of dermatological disorders, appearance, and emotions of the learners.

Type of dermatological disorders

LP1 was a male, Grade 10 learner with acne. LP2 was male, in Grade 11 and had eczema. LP3 was a female, Grade 11 learner with an undiagnosed skin condition that appeared on her legs. LP4 was a Grade 10 female learner that struggled with pimples. LP5 was in Grade 11, a female learner, and suffered from eczema. LP6 was a female, Grade 11 learner with psoriasis and eczema. LP7 was also a Grade 11 female learner with acne and fungus under her skin. LP8 was a female learner, who was in Grade 10 and suffered from dry skin and eczema.

Appearance of the skin

LP1's response to the question about the appearance of his skin during an outbreak was: "*A lot of pimples.*" LP2 had the following to say about his skin: "*It is dry and grey.*" LP3 said, "*while I'm scratching, I left blue marks behind."* LP4 described her skin as red, dry, and itchy. LP5's skin was flaky and dry. LP6 had a dry and itchy skin. Dryness and pimples were the skin conditions that LP8 experiences.

LP1 felt that his dermatological disorder was under control but still not the way that he wanted it to be. LP3's dermatological condition only occurred during winter. LP4 had a dermatological condition that appeared sporadically. LP6 and LP7 believed that their dermatological disorders improved with the use of antibiotics.

From this investigation it is clear that learners experience different dermatological disorders that leave physical scars. This is evident from the following statement by LP7: "*It is dry and makes dark circles around her eyes and leaves dark spots after pimples are gone.*"

Emotions of learners

LP1's exact words about his emotions were: "*Sad. When I look in the mirror I believe I see the little me.*" "*It makes me feel bad*" was LP2 response to his emotional state about his dermatological condition. LP1's words were: "*I have built such a wall around me that no negative word anyone says will affect me.*" LP2 had become accustomed to his condition and felt that each person had his/or her own way of coping with the dermatological condition.

LP3 experienced restrictions in terms of her dress code. She could not wear the clothes that she wanted to wear because she was not happy with the way her body changed. The scratching angered her and frustration set in because no one could help her with the scratching. The emotions that LP4 experienced were shyness, stress, sadness, and being scared.

Antisocial behaviour was the effect of LP5's dermatological disorder. She also felt bad and depressed at times. LP6 was uncomfortable and described her emotional health as

70/100. LP7 described herself as comfortable and confident. However, at times she was also insecure and emotional around people. LP8 was shy because of her dermatological disorder. Her words were "*I feel to cry, and I feel down."*

The investigation emphasised the emotional impact of chronic dermatological disorders. Emotions that the LPs had in common were sadness, feeling bad, frustration, anger, shame, shyness, insecurity, and crying.

5.3.1.2 *Theme 2: Learning*

Learning was identified as the second theme, of which schoolwork and school attendance were sub-themes.

Schoolwork

LP1's schoolwork was not affected by his dermatological disorder. LP2's response was: "*I spend more time with my skin than with my schoolwork.*" He attributed this to difficulties focusing and completing his schoolwork because of his itchy skin. LP3 felt that the scratching is time-consuming, causing her to have less time to spend with schoolwork. LP4 said: "*That has no effect on my schoolwork.*"

LP5 said the effect of eczema on her schoolwork was not too bad but that sometimes she was unable to write. "*I am not always at my best*" was the response of LP6 on how the eczema and psoriasis influenced her schoolwork. *"I can't focus or give my full attention in class and at home,*" was the response of LP7 to how the acne and fungus affected her schoolwork. LP8's words were "*No, don't stay at home because of my skin.*" The answer of LP8 indicated a misinterpretation of the question. The answer was geared more towards school attendance than schoolwork.

School attendance

LP1, 3, 4, 7 and 8's school attendance was not affected by their chronic dermatological disorder. L6 failed a grade in 2018 because she was absent for one month. LP5 had to stay at home because of the severity of her skin condition.

5.3.1.3 *Theme 3: Behaviour*

Behaviour was identified as the third theme, with behaviour in class and behaviour amongst peers as sub-themes.

Behaviour in class

LP1's response to whether acne affected their behaviour in class was: "*Not at all does my condition affect my behaviour in class*". LP2 said: "*I can't sit still because I itch a lot.*" LP3 said covering up with clothes helped that her behaviour in class was not affected by her dermatological disorder. LP4, 6 and 7's behaviour was not affected by their dermatological disorders. LP5 was uncomfortable and shy in class. LP8's response was "*Sometimes it's clear*".

Behaviour amongst peers

LP1 said "*I avoid my friends when my condition becomes worse*". LP2 avoided public spaces because he wanted to scratch. LP3, LP4 and LP7 did not have problems socialising with friends. LP5 said her friends are used to her dermatological condition. LP6's response was: "*I am not always an interactive person. I like doing things on my own*." LP8 said: "*I am shy and wear something over it*."

The behaviour amongst or socialisation with peers of LP3, 4, 5 and 7, was not influenced by their dermatological disorder, whereas it caused antisocial behaviour or isolation and shyness in other participants. One participant also described herself as an introvert during the investigation.

5.3.1.4 *Theme 4: Support*

The fourth theme that was derived from the questionnaires was the support that learners received from their teachers, parents, and peers.

Teachers

LP1 said that teachers were understanding but also strict. LP8 experienced teachers as understanding but did not want to inform them about her dermatological condition for a

fear of being judged. LP2 said: "*The teachers don't treat me different than any other child.*" He also felt it was not important to inform the teachers about his dermatological condition.

According to LP3, teachers encourage learners to stay positive and not be weak because of their dermatological disorder. Teachers encouraged her to stand up and do her work. LP4 received good treatment from teachers. However, there were also times when teachers told her not to lie on her arms in class because they did not know about her dermatological condition.

LP5 experienced teachers as sympathetic towards her. LP6 said: "*They don't always believe that I have the condition or don't feel good.*" She felt teachers needed to be informed about a learner's dermatological condition for them to understand the learner better. LP7 and LP8 did not have any problems with teachers' treatment or behaviour towards them. The teachers of LP8 knew about her dermatological condition.

Parents

The parents of LP1 were described as very supportive. They did not pressurise him to perform in school and assured him of his beauty despite his dermatological disorder. They also provided the medical treatment that he needed. LP2 said: "*When my eczema is bad, my mom and dad are always there*." They encouraged him to do schoolwork even if his eczema was severe. He also received spiritual support when he felt like giving up. Furthermore, his parents always bought him the ointment that he needed for his skin.

The parents of LP3, 4, 5, 7 and 8 were described as very supportive. LP4 said: "*My mom tells me how I must feel, and she always has something nice to say*." Her mom always talked about God. LP5's parents provided spiritual support by praying for her. LP7's parents encouraged her to believe in God and prayed for her. LP8 said: "*She talks about it and describes it to me*." All participants' parents provided the necessary medical treatment.

Peers

Four out of the eight participants' support from peers were not affected by their dermatological condition. LP1's response was: "I avoid my friends when condition becomes worse". LP2 said: "*I don't want to be in public or with my peers because when it is dry, I just want to scratch.*" LP6 described herself as a non-interactive person that likes doing things on her own. LP1, 2 and 6 therefore preferred to be on their own when they were experiencing a flare-up.

LP3 did not have a problem with her skin around peers. "*I feel comfortable with my friends when we go out*", was LP4's account. LP5's friends were used to her skin problems. LP3, 4, 5 and 7 were met with acceptance and support from friends despite their chronic dermatological condition. LP8 said "*I am shy and wear something over it*." Friends of LP8 were thus not given a chance to show support because she covered her skin.

Overall, the participants' peers were supportive of their dermatological disorders. However, some of the participants chose to not share their experiences with their peers and therefore did not know if their peers would be supportive or not.

5.3.2 Interviews with parents

The interviews with parents were conducted to investigate the sub-question of what parents, experience with their children who have chronic dermatological disorders. Two parents participated in the interviews. One participant was male and one female. The parents were referred to as parent participant one (PP1) and parent participant two (PP2). The following themes were identified from the interviews.

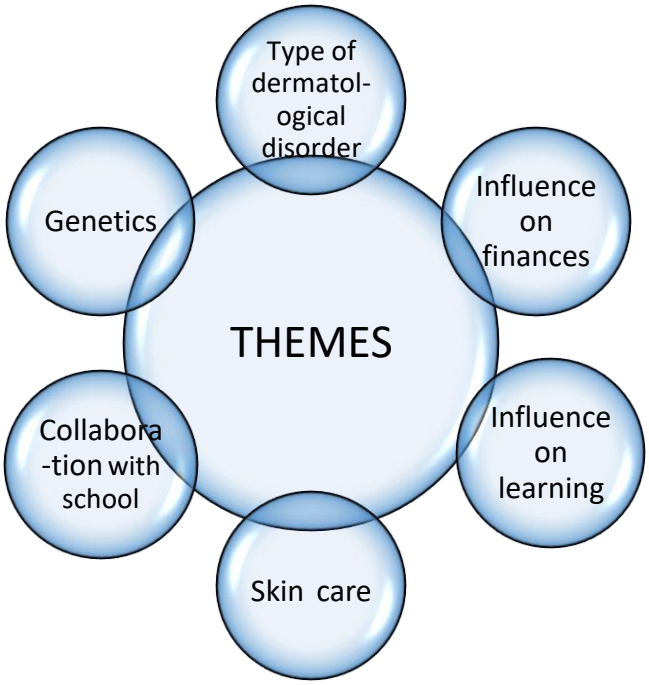

Figure 5.3: Themes identified from parent interviews

5.3.2.1 *Theme 1: Type of dermatological disorder*

Both parent participants' children had eczema. PP1's child had eczema "*since he was a baby*". PP2 said: "*He has eczema… since… he was born."* Both children suffered from itchy skin. PP1 said: "*It's mostly itchiness, redness of the skin and then dry skin*". PP2 said: "*He will have… uhm… itchy skin, he will have… uhm…also his skin will also crack open… uhm…he will… uhm… really scratch a lot specifically… uhm… in his… uhm…between his knees and his elbows and also the eyes as well."*

5.3.2.2 *Theme 2: Influence on learning*

Parent participants were asked whether they felt that the child's dermatological disorder had an influence on their learning and the responses were as follows: PP1 said: "*I'd say it's mostly concentration*". PP2's response was: "*It is very difficult. He cannot concentrate. He doesn't get enough sleep because he scratches at night. He is normally tired in the morning. He does not want to wake up. He doesn't actually want to go to school*."

5.3.2.3 *Theme 3: Influence on finances*

The children also had siblings with chronic dermatological disorders, which put financial strain on the family. On the question of the influence of chronic dermatological disorders on family finances, PP1 had the following to say: "*A lot, because the ointment that I get at the chemist is a special ointment that they mix for him and it is quite expensive and then he need a certain soap to wash himself and so, ja, it's expensive.*"

PP2 said: "*Well obviously it is quite expensive to have all the creams. And that we buy on a monthly we sometimes buy monthly…uhm… we buy that. It is also very hard on our medical aid. There were a few times that because of him going so many times to the doctor that we couldn't go… uhm… because… uhm… he actually depleted our benefits."*

5.3.2.4 *Theme 4: Skin care*

The parents had their children's skin care condition under control by using a special soap, ointment, allergy tablets, and visiting the doctor when necessary. PP1 said her son uses the following treatment for his skin: "*The allergy pill Fenegin ja, and then there is mos the special soapie for the skin to wash."*

PP2 had the following to say about skin care for his son: "*He has a soap that he baths in and then also he also has uhm also ointment that we put on his skin. He uses for specifically for his skin, we have a cream that we get from that is mixed at the chemist that he uses and then also he also had an injection quite a few times at the doctor. He also has Advanton cream that we put on for him."*

PP1 had consulted a doctor about her son's dermatological disorder but was never referred to a dermatologist. PP2 visited his house doctor and was referred to a dermatologist for treatment. To the question of whether they have their children's skin treatment under control, PP1 answered: "*Yes, most of the time, mostly under control"*. PP2 said: "*Ja, his condition is under control."*

5.3.2.5 *Theme 5: Collaboration with school*

The questions on informing the school and the need for teachers to know about their children's chronic dermatological disorder was answered as follows: PP1: "*I did not inform teachers. I didn't think it was until now*." PP2 said: "*When he was in primary school, we*

informed the teachers but he, he's coping better with it in high school. Yes, because I think sometimes it will look that my son is not interested in doing something but it's not really that it's just because he is concentrating on the itching and as I've said, he is tired because then he didn't sleep through the night and also sometimes it is just so irritating for him as well, which makes it very difficult for him."

5.3.2.6 *Theme 6: Genetics*

On the question of the influence of the chronic dermatological disorder on the family, PP1 had the following response: "*It's frustrating because ja. We've got another child that has eczema and I'm also struggling with it. It's mostly frustrating when one of us has a outbreak*". PP2 said: "*For us as a family because we also have another daughter that also have…uhm… eczema it is very difficult."*

Both parents mentioned that there are other family members that also had chronic dermatological conditions. The fact that other family members also had a chronic dermatological disorder might be an indication of genetic transference.

5.3.3 Interview with teachers in a focus group

The focus group interview consisted of five teachers of which one was male and four females. Teachers were addressed using codes to ensure their anonymity. The themes that were identified from the interviews were:

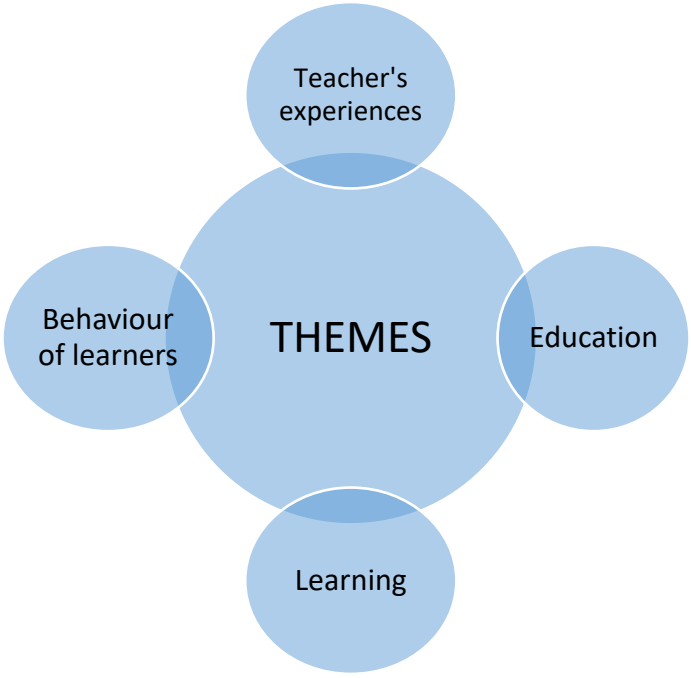

Figure 5.4: Themes identified from the focus group interview

These themes cover the sub-question of how teachers can accommodate learners with chronic dermatological disorders in class. From these themes the following subthemes emerged.

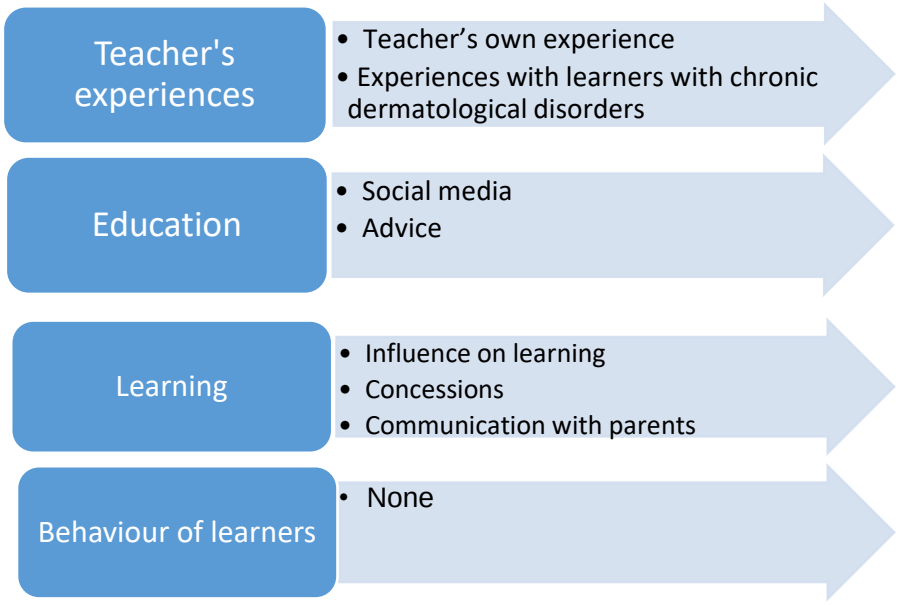

Figure 5.5: Sub-themes identified from the focus group interview

5.3.3.1 *Theme 1: Teacher's experiences*

The investigation revealed that the teacher participants themselves experienced chronic dermatological disorders and some had experience with learners with chronic dermatological disorders.

Teacher's own experiences

The researcher asked the teachers to introduce themselves. During this short introduction, three of the five teachers that participated in the focus group interview mentioned that they either experienced or are experiencing a chronic dermatological condition. TP5 said: "*As a high school learner, I suffered from acne since grade 9 and that had a big effect on my self-image and my self-confidence. I think the reason being your peers and teachers as well. They made it seem like that you've got this illness like AIDS or something".* TP4's skin colour was influenced by her skin disorder.

TP3 said: "*I have been suffering from a skin disorder for more than 36 years*". She stated that she would like to use her experience with eczema to help learners because she is still learning about it. The teachers' experience with eczema helped them to be sympathetic and understanding towards learners with chronic dermatological disorders.

The teachers were willing to educate learners and parents about chronic dermatological disorders and the laws about chronic dermatological disorders. TP3 had the following to say about making concessions for learners with chronic dermatological conditions*: "I had a learner with eczema around the mouth. And when she had to do like oral, I'll take her after school".*

TP5 motivated learners by saying: "*A learner with acne, for example, must know it's only an illness. It can be treated. It's not a death sentence. It's nothing to be shy about, it can be treated".* They were also willing to share remedies with learners and parents. TP1 said: "*In my class, the learner in my class … uhm … I gave her a bit advice as to how to treat her, some local, what do you call it, remedies*".

Experiences with learners with chronic dermatological disorders

When asked, only two of the teacher participants shared their experiences with learners with chronic dermatological disorders. In 2019, TP2 taught a learner with eczema. TP1 also taught a learner with a chronic dermatological disorder.

5.3.3.2 *Theme 2: Education*

The teacher participants suggested that learners and parents be educated about chronic dermatological disorders. TP5 said: "*So, I will search for information and I will send it to the parents and to the learners for self-study".* TP4 said: "*For me, I think I will make a topic of it to speak to the whole class about this illness, what the cause of this illness is."*

The teachers were thus willing to educate their learners without skin conditions to ensure a better understanding of the learners who do have a chronic dermatological disorder. TP5 encouraged learners not to judge one another. TP5 said: *"As a teacher I would teach all the other learners to respect this learner and also let them know it's not a death sentence; don't judge other people. I will be on the side of the learner."*

Social media

The teacher participants were educating parents about skin disorders and made use of technology to share information with learners and teachers. TP3 said: "*I communicated with the parents and with her via SMS, via a letter, and when I get information I'll send to the parents."* TP5's view was: "*We live in an age of technology. Information is available to anybody. I will use communication channels like WhatsApp, Facebook to communicate this information I found on the internet about the condition."*

Advice

TP5 said that he is not just willing to teach learners about chronic dermatological disorders but also on the laws from the Department of Education. He said: "*I will go onto the internet and download these laws and put it on the notice boards of the school.*" Similarly, TP1 was willing to share treatment ideas with parents and learners.

The teachers also shared ways in which they motivated learners with chronic dermatological disorders. TP5 said that he told the learners that a chronic dermatological disorder was treatable. The learners were also reminded that they were not the only ones with illnesses and that there were learners with more severe conditions**.**

TP1 encouraged them by telling them that they can overcome the dermatological condition, that they should stay positive, and that they can improve their confidence by treating their skin. Her exact words were: "… *that she is not the only one that have a condition like this. There is many other people and maybe the severity of her a condition at that particular time, where other people or other type of learners maybe have it more worse than what she has. For now, hers is at last a bit treatable. She can overcome it as she grows older. It could be improving or it could get worse*."

TP5 acknowledged that from his own experience, a chronic dermatological disorder could have a negative effect on learners' self-image. However, he encouraged learners to not define themselves through their skin but through who they are as a person.

5.3.3.3 *Theme 3: Learning*

Influence on learning

TP2 taught one learner with a chronic dermatological disorder and had the following to say about the learner: *"My experience was that she was very shy. She did not want to work in class because she did not want to expose hands and let her friends see that her hands were not well. That made her to be shy in clas*s."

TP1's response was: "*In my situation the learner was also a bit shy but uhm she coped, for the time being she coped a bit better in terms of you know personal… uhm… but there was no effect that it had on her schooling."* Both learners worked better at home and their concentration was not really affected by the skin condition.

Concessions

In response to concessions, the teacher participants had the following to say. TP4: "*I would then minimise the work on that stage or I will communicate with the parents that they can finish the work then at home."* TP1 mentioned that she will give extra time to

learners to complete their activities. Her view on rewriting was: *"…just give another date for the learner to rewrite the test."* TP3 said: "*And when she had to do like oral, I'll take her after school."*

It is thus clear that all teacher participants were willing to make concessions for learners with chronic dermatological disorders. TP1 and 2 allowed them to complete their work at home. TP4 was willing to give extra time for learners to complete their work, and TP1 allowed them to write tests on another date if they were absent because of their dermatological conditions.

However, TP5 stressed that learners with chronic dermatological disorders should not be treated differently and that they must know that it is a condition that can be treated. TP5's exact words were, "*It's not a death sentenc*e." TP4 felt that the severity of the learner's skin condition influenced the teacher's decision to treat him or her differently.

Communication with parents

Communication with parents was already a normal practice for some of the teachers. Communication channels like SMS and WhatsApp were being used to share remedies, information, and schoolwork that have been missed. TP4 stated, "*I will communicate with the parents that they can finish the work then at home.*" TP5 said, "*We live in an age of technology. Information is available to anybody. So, I will search for information and I will send it to the parents and to the learners for self-study. I will use communication channels like WhatsApp, Facebook to communicate this information I found on the internet about the condition."*

5.3.3.4 *Theme 4: Behaviour of learners*

TP1 had the following to say about the behaviour of learners with chronic dermatological disorders in class: "*In my situation, the learner was also a bit shy, but she coped in class. For the time being she coped a bit better in terms of you know personal, but there was no effect that it had on her schooling.*" TP2 said, "*… in my experience that the learner was always quiet*. *My experience was that she was very shy. She did not want to work in class because she did not want to expose hands and let her friends see that her hands were not well that made her to be shy in class.*"

Both teachers recalled that the learners' unwillingness to work in class were not out of disrespect for teachers or laziness, but that they preferred working at home because of their dermatological disorder.

5.4 CONCLUSION

Chapter five analysed the information gathered through the research. In the introduction, the aim of the research was reviewed. This was followed by the research process and remarks about the interviews and questionnaires. Chronic dermatological disorders influenced learner participants' learning in different ways. This was emphasised by the different themes and sub-themes derived from the interviews and questionnaires. Learners, parents, and teachers' experiences with chronic dermatological disorders were also highlighted, as well as the importance of the role of parents and teachers in the education and well-being of learners with chronic dermatological disorders. Chapter 6 consists of a summary of the findings and recommendations.

CHAPTER 6

FINDINGS AND RECOMMENDATIONS

6.1 INTRODUCTION

This study explored learners, parents, and teachers' experiences of chronic dermatological disorders as barrier to learning. It was therefore necessary to:

- document how the parents of children with chronic dermatological disorders were affected.
- investigate the effects of dermatological disorders on learners' learning.
- investigate the effects of dermatological disorders on learners' behaviour in class.
- investigate how health policies for South African schools make provision for learners with dermatological disorders.
- identify how teachers could help learners with dermatological disorders cope with the challenges that they experienced in class and school.

Bronfenbrenner states that learners learn and develop through their person-to-person interactions with parents, teachers, and peers, as well as the influence of their personal characteristics (Geldenhuys & Wevers, 2013:3). Bronfenbrenner's theory was important to understand the systematic approach to human and social development in this study. It was especially valuable for educators to understand the influences on the various levels, which enabled them to build fundamental relationships with students and create a communication-rich classroom where parents were involved.

Against this background, this chapter highlights the main findings of the investigation by providing a summary of the main themes, with supporting evidence from the literature review. The shortcomings of the research are discussed. Recommendations to improve the effective learning of learners with chronic dermatological disorders are made.

6.2 SUMMARY OF THE INVESTIGATION

The data for this study was collected through questionnaires with the learners, interviews with parents, and a focus group interview with teachers. The interviews were recorded and then transcribed. The data was then analysed by identifying themes and sub-themes.

The main themes derived from the learners' questionnaires, were:

- learner experiences
- learning
- behaviour
- support

The three sub-themes derived from the learners' experiences were the type of dermatological disorder, appearance, and emotions. The learning theme consisted of two sub-themes, namely schoolwork and school attendance. Behaviour in class and behaviour amongst peers were identified as the two sub-themes under the main theme behaviour. The theme of support consisted of three sub-themes, namely teacher, parent, and peer support.

The main themes derived from the parent interviews were:

- type of dermatological disorder
- influence on learning
- influence on finances
- skin care
- collaboration with school
- genetics

The main themes gathered from the teacher interviews were as follows:

- teacher's experiences
- education
- learning
- behaviour of learners

Teacher experiences consisted of both the teacher's own experiences and their experiences with learners with chronic dermatological disorders. The education theme had two sub-themes, namely social media, and advice. The learning theme had three sub-themes, namely the influence on learning, concessions, and communication with parents. No sub-themes were identified for the theme behaviour of learners. The above-mentioned themes will be discussed in more detail in the paragraphs below.

6.3 FINDINGS FROM LEARNER QUESTIONNAIRES

6.3.1 Theme 1: Learner experiences

Each of the eight learner participants had a different dermatological disorder. However, all of the disorders were externally visible. Table 6.1 concludes the learners' experiences about their dermatological condition in terms of type, appearance, and emotions.

Table 6.1: Subthemes – Type of dermatological disorder, appearance, and emotions

Participant	Type of dermatological disorder	Appearance of the skin	Emotions of the learners
1	Acne	A lot of pimples	Sad
2	Eczema	Dry and grey	Bad
3	Undiagnosed skin disorder	Blue marks	Problem, not nice
4	Pimples	Red, dry, itchy	Shy, scared
5	Eczema	Flaky, dry	Antisocial
6	Psoriasis/eczema	Dry, itchy	Uncomfortable
7	Acne/fungus under skin	Dry, dark circles around eyes, spots because of pimples	Comfortable, confident
8	Dry skin, eczema	Dry and pimples	Shy

Conclusion 1: *Eczema is a prevalent dermatological disorder.*
Conclusion 2: *Learners' outward appearances are affected by the chronic dermatological disorder.*
Conclusion 3: *Most learners are emotionally affected by the experiences with dermatological disorders*.

From the literature, it is evident that psoriasis and atopic dermatitis affect the physical appearance of a child, which has a negative impact on their quality of life (Na, Chung & Simpson, 2019:2). Barankin and DeKoven (2013:9) state that skin diseases may also cause anxiety, depression, and psychological problems. However, the one learner that was not emotionally affected by her dermatological disorder described herself as being

confident and comfortable in general, which could be the reason for her not being emotional about her dermatological disorder.

6.3.2 Theme 2: Learning

6.3.2.1 *Sub-theme 1: Schoolwork*

Three out of the eight learners felt that their dermatological disorder did not influence their schoolwork. This means that the majority, five out of eight, felt that their dermatological disorder did influence their schoolwork. The deduction from this group of learners is that more learners' schoolwork is influenced by their dermatological disorder than not. It is thus a barrier to learning for some.

Conclusion: *Schoolwork is affected by dermatological disorders.*

Atopic dermatitis has a harmful effect on the schoolwork, learning, and academic performance of young learners (Cork, Danby & Ogg, 2019:802). However, an audit with 235 atopic dermatitis patients done by Cork et al. (2019:802) stated that 87.5% of school-going children returned to school within six weeks after their treatment. It seems that although atopic dermatitis has a harmful effect on the learning of learners, it is possible for them to return and complete their education. This is evident from the fact that one of the learner participants failed because of absenteeism due to her dermatological disorder but went back to school the following year.

6.3.2.2 *Sub-theme 2: School attendance*

Dermatological disorders influence school attendance. One learner failed a grade due to absenteeism caused by the dermatological disorder. Another learner struggled to focus because of the itching due to the dermatological disorder. One of the learners could not attend school because her skin gets sore. However, five out of the eight learners' school attendance were not affected by the dermatological disorder. Thus, the learners whose school attendance were affected by their dermatological disorder was in the minority.

Conclusion: *In some cases, the dermatological disorder causes absenteeism and failure.*

In South Africa, a concerted effort is being made to ensure that learners with special needs attend school. The fact that the learner who failed because of absenteeism, returned to complete her schooling, is commendable and in line with the Department of Education's vision to furnish learning for all learners, irrespective of their disabilities or health constraints.

6.3.3 Theme 3: Behaviour

6.3.3.1 *Sub-theme 1: Behaviour in class*

Five of the eight participants' behaviour in class were not affected by their dermatological disorder. However, one of the participants found the itching irritating and uncomfortable. Another learner's shyness in class was not part of her personality but a result of the chronic dermatological disorder. The last learner participant misunderstood the question and said that sometimes it is clear.

Conclusion: *Irritability, uneasiness, shyness, and embarrassment are some of the behaviour patterns experienced by learners with chronic dermatological disorders.*

6.3.3.2 *Sub-theme 2: Behaviour amongst peers*

Three learner participants were uncomfortable around peers because of their chronic dermatological disorder. One of the learner participants was an introvert and did not like to interact with other learners. Disguising the dermatological disorder and avoiding friends, public places, and socialising was some of the behaviour identified by the participants.

Social isolation is one of the negative effects that learners with chronic dermatological disorders experience. As discussed in Chapter 2, the embarrassment of learners with chronic dermatological disorders resulted in learners refusing to visit public places like gyms. Learners were thus embarrassed because their dermatological disorder is outwardly visible. They therefore tried to avoid the stares and comments by not socialising.

One of the four participants that were comfortable amongst peers said that their friends were used to the dermatological disorder, which means that she did not have to behave differently because of it.

Conclusion: *Behaviour amongst peers is positively and negatively affected by chronic dermatological disorders.*

Learners usually want to fit in with a group of friends. If they themselves have not accepted their dermatological disorder, it will be difficult for them to understand that anyone else will. Learners with dermatological disorders can also be nervous and anxious. Nonetheless, most of the learner participants were accepted and comfortable amongst their peers. This self-confidence has the ability to reduce the anxiety caused by their dermatological disorder (British Association of Dermatologists, 2020:1).

6.3.4 Theme 4: Support

6.3.4.1 *Sub-theme 1: Teachers*

Most of the teachers had positive attitudes towards learners with chronic dermatological disorders. Two of the teachers were described as understanding by the learner participants. One learner was treated the same as the rest of the learners. Another learner said she was treated well because the teacher knew about her condition. One of the teachers was sympathetic towards learners with chronic dermatological conditions and encouraged one learner participant to be positive and strong. Another learner did not experience any problems with the teachers. However, one of the responses to this question was "*none",* which can be interpreted as receiving no assistance from the teachers.

Conclusion: *Teachers go beyond the call of duty to support and accommodate learners with chronic dermatological disorders.*

Good communication skills, which were explained by Tuswa (2016:55) as a good teaching practice, were portrayed by most of the teacher participants. They were willing to share information and remedies that could help with the treatment of the chronic

dermatological disorder. Empathy, building relationships, understanding the fears of the learners, listening, and understanding are essential characteristics that teachers need to portray towards learners (Mereoiu, Abercrombie & Murray, 2016:9). Additionally, the importance of teachers being informed about the learner's chronic dermatological disorder was emphasised to bring about better understanding between teacher and learners.

6.3.4.2 *Sub-theme 2: Parents*

The learner participants said that they received medical, emotional, spiritual, and educational support from their parents. The parents encouraged learners to stay positive and work despite their chronic dermatological disorder.

Emotional support

The learners described their parents as supportive, present, helpful, nice, and encouraging. One learner's answer to the question "Describe the emotional support that you receive from your parents during flare-ups of your dermatological condition", was "*100%*". All the learners received positive emotional support from parents.

Academic support

Parents were described as supportive, encouraging, helpful, uplifting, 100%, and willing to write when learners couldn't (due to the dermatological disorder). One of the parents contacted teachers or friends to get the schoolwork when learners were absent.

Spiritual support

Parents complimented, motivated, prayed, and encouraged learners not to give up.

Medical support

Parents supported learners medically by taking them to the doctor or hospital, buying medicine or ointment from the chemist, getting the best medical care, and trying everything possible to help with the dermatological disorder.

Conclusion: *Parents are the primary support structure that learners rely on.*

To prevent learners with chronic dermatological disorders from becoming part of the statistics of dropouts, getting involved in unlawful activities such as theft, or teenage pregnancy, parents, teachers, and learners need to support each other. Prayer and believing in God for healing are the ways in which parents supported their children spiritually. The medical, emotional, academic, and spiritual support that learners received from parents indicate their commitment towards the success of their children.

6.3.4.3 *Sub-theme 3: Peers*

Four of the learner participants were accepted within their circle of friends despite their chronic dermatological disorder. Another participant described herself as an introvert, while the remaining three chose to be on their own during flare-ups.

Conclusion: *Peers are supportive of learners with chronic dermatological disorders.*

Although the learners were mostly supported by peers, there are risks involved in suffering from a chronic dermatological disorder. Adolescent learners might experience dermatological disorders that are visible, namely atopic dermatitis and acne. They are therefore at risk of being bullied or teased, as these two dermatological disorders are often linked to bullying (Magin, 2013:66).

Half of the learner participants indicated having friends that support them. The support could even be more if the other four participants were comfortable enough to socialise with friends. Learners need to be reminded that their personality plays an even bigger role in who they are as a person than outward appearances.

6.4 FINDINGS FROM PARENT INTERVIEWS

6.4.1 Theme 1: Type of dermatological disorder

Both parents identified eczema as the dermatological disorder that their children were experiencing. The prevalence of eczema worldwide is 15-20 % for children, and 1-3% for adults (Allergy & Asthma Network, 2021:1). The fact that eczema is a global dermatological disorder increases the availability of information and treatment. Parents and learners can also perceive that they are not the only ones affected by the dermatological disorder.

Conclusion: *Eczema is a prevalent dermatological disorder.*

6.4.2 Theme 2: Influence on learning

Both parent participants said that their children's attention span was influenced by the chronic dermatological disorder. The lack of sleep, due to scratching, led to tiredness and absenteeism. The learners cannot concentrate or do their work because they are too tired and need to sleep, which leads to absenteeism. Absenteeism results in learners not covering the curriculum and missing some tests and exams.

Conclusion: *Chronic dermatological disorders influence how learners function at school.*

The parents need to inform teachers about their children's skin condition, tiredness, and absenteeism. If not, the teacher might not understand the reason for the child being tired or absent.

6.4.3 Theme 3: Influence on finances

In a South African study about the prevalence of paediatric skin conditions at a dermatology clinic in KwaZulu-Natal, it was found that economically atopic dermatitis was found to be the highest burden of the skin disorders. This means that if parents cannot afford treatment, the burden is placed on the health system (Katibi, Slova, Chateau & Mosam, 2016:1). This study was done with children that could not afford to go to a doctor or dermatologist.

However, this study found that both parents were willing to spend money on doctor's appointments and the treatment of their children's chronic dermatological disorder. Although they had medical aid, they still found the treatment of the dermatological disorder of their children expensive, as the medical aid does not always cover all the medication. PP2 said that their medical aid would be depleted before the end of the year. However, applying for chronic medication on the medical aid can help to ensure the medical aid will cover most of the treatment.

Conclusion: *Parents spend what they can afford on their children with chronic dermatological disorders.*

Parents should be encouraged to seek affordable medical care for their children's chronic dermatological disorder. If the learners are healthy, it would be easier for them to attend school and concentrate on their schoolwork. Parents that cannot afford medical treatment should make use of clinics and public hospitals.

6.4.4 Theme 4: Skin care

Parents need to adhere to a routine, talk and listen to children, show positivity towards them, and manage the chronic dermatological disorder (Morawska & Mitchell, 2015:1).

Conclusion: *Parents have skin care under control.*

The parents in the study did that by providing medical treatment and buying ointments to relieve the symptoms of their children's dermatological disorder. Fenegen and Advanton were the two ointments regularly used by the children. Additionally, PP2 was referred to a dermatologist, whereas PP1 has never been referred to a dermatologist.

The town in which the research was done has five dermatologists that serves the town as well as surrounding towns. However, a study done about healthcare in KwaZulu-Natal in South Africa revealed that there are not enough dermatologists in the country (Aboobaker, 2007:9). Private dermatologists must serve more than one town and patients have to wait for months for an appointment (Aboobaker, 2007:9). Additionally, the training received by doctors and nurses about dermatological disorders is not sufficient. Proper training for nurses and doctors in dermatological disorders can alleviate this problem.

6.4.5 Theme 5: Collaboration with school

Collaboration with the school formed part of PP2's strategy to improve his child's learning. However, PP1 was not aware that a parent should inform the school about a child's chronic dermatological disorder. The fact that PP2 informed the school about his son's dermatological condition is an indication that some parents are aware of collaborating

with teachers towards ensuring effective learning of their children. Regardless, participating in the research taught PP1 that she can collaborate with the school.

Tuswa (2016:42) describes collaboration as the challenge of working together as a team to achieve one's goal. Parents should form partnerships with other parents who have children with disabilities by talking to them. Additionally, parents should form partnerships with the school and teachers through parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community (Mereoiu et al., 2016:3). At the district level, all stakeholders including the parents, should collaborate to form the District Based Support Team and make use of resources to address the specific needs of the learners (Tuswa 2016:43).

Conclusion: *Collaboration between parents and teachers is essential.*

6.4.6 Theme 6: Genetics

The fact that other family members also suffer from eczema is an indication that the condition is hereditary. PP1 said that she and her daughter also have eczema. PP2 said that his daughter also has eczema.

Conclusion*: Chronic* d*ermatological disorders are genetically transferable.*

6.5 FINDINGS FROM TEACHER INTERVIEWS

6.5.1 Theme 1: Teacher's experiences

6.5.1.1 *Sub-theme 1: Teacher's own experiences*

Teachers' own experiences with chronic dermatological disorders created empathy and understanding for learners with chronic dermatological disorders. One of the teacher participants has been suffering from eczema for more than 36 years. A second teacher participant had acne when he was at school, which resulted in a problem with his self-image. A third teacher participant explained how an immune system problem influenced her skin colour.

The rest of the teacher participants did not share any personal experiences with dermatological disorders because it was not a formal question. The three teachers that

shared their experiences shared it voluntarily. Although all the teachers did not share experiences, it was clear that the teachers were willing to support the learners with chronic dermatological disorders, especially with their schoolwork.

One example is that even though teachers must complete a curriculum within a set timeframe, they often deviate from the timeframe to allow learners with chronic dermatological disorders to complete the curriculum. The right to education for all should be the teachers' guide in making decisions in conflicting situations like the above-mentioned.

Conclusion: *Teachers are empathetic towards learners with chronic dermatological disorders.*

6.5.1.2 *Sub-theme 2: Experience with learners with chronic dermatological disorders*

Two of the teachers shared their experiences of teaching learners with chronic dermatological disorders. One teacher experienced it in 2019, and another 10 years ago. One of the teacher participants said that the learner was a bit shy and preferred to work at home. The second teacher said that the learner coped with the work but also preferred to work at home. Both teachers allowed the learners to complete their work at home.

Conclusion: *Teachers have experienced teaching learners with chronic dermatological disorders.*

The other three teachers shared their own experiences with chronic dermatological disorders and their willingness to share their experiences with the learners. The teachers' experiences, whether with a child with a chronic dermatological disorder or their own dermatological disorders, created understanding for the learners.

6.5.2 Theme 2: Education

6.5.2.1 *Sub-theme 1: Social media*

Other professions, like mental health, are already using social media to share knowledge, which has inspired teachers to have a structured plan on how to use social media in

schools. Consequently, teachers communicate with parents and learners through WhatsApp, Facebook, and the internet.

TP3 communicated with parents through WhatsApp and letters. TP5 said that we live in an age of technology, which makes communication through WhatsApp and Facebook with parents easier. TP2 also shared ideas about treatment with a learner and encouraged her to share it with her parents. One of the teachers sent letters with advice to parents to help the learner with their chronic dermatological disorder.

Conclusion: *Teachers are willing to use social media, letters, and conversations as collaboration tools.*

6.5.2.2 *Sub-theme 2: Advice*

Although teachers were empathetic towards learners, they made it clear that having a chronic dermatological disorder should not influence a learner's learning. TP5 was eager to download the laws concerning health issues and avail it to learners and parents. TP2 shared remedies with a learner who had the dermatological disorder and asked the learner to ask her parents to buy the ointments. TP3 also indicated that she shared treatment ideas with learners and parents. TP4 even availed herself to teach a lesson about chronic dermatological disorders. Teachers thus advised learners to seek medical advice and treatment to help them cope with their condition.

Conclusion 1: *Teachers have access to laws concerning dermatological disorders that they are willing to share with parents and learners*.

Conclusion 2: *Teachers are empathetic but strict towards learners with chronic dermatological disorders.*

6.5.3 Theme 3: Learning

6.5.3.1 *Sub-theme 1: Influence on learning*

One of the learners preferred to work at home because she did not want her friends to see the scars caused by the dermatological disorder. The second learner coped with the schoolwork but also preferred to work at home.

Conclusion: *Learners prefer to work at home.*

Different learners handle their dermatological disorder differently, and teachers should acknowledge this. If a learner who prefers to work at home is forced to work in the classroom, it can lead to confrontation between the learner and the teacher. The teacher's focus should then rather shift to the work being done, whether at home or in class.

6.5.3.2 *Sub-theme 2: Concessions*

Teachers were willing to make the following concessions:

- extra time
- different exam date
- completing tasks after school

The concessions or willingness to make concessions were because learners did not want to work in class and were often absent for tests. The amount of work was also considered, as these learners had a shorter concentration span.

The basic right of learners to receive education was discussed in Chapter 3. However, learners with dermatological disorders were limited in their learning in more than one way, including absenteeism, short concentration span, and preference to work at home. The teachers that also experienced dermatological disorders understood these learners' limitations.

Conclusion: *Teachers are willing to make concessions for learners with dermatological disorders.*

6.5.3.3 *Sub-theme 3: Communication with parents*

The three important reasons for collaboration or communication between parents of children with disabilities and teachers are to communicate about educational levels, participate in the evaluation process, and identify goals and develop an Individualised Education Program (Mereoiu, Abercrombie & Murray, 2016:2). Prior to the study, some teachers were already collaborating with parents concerning their children's chronic dermatological disorder. They were willing to help by:

- sharing advice
- educating learners, peers, and parents about chronic dermatological disorders
- sharing laws about chronic dermatological disorders
- sharing information about treatment
- sending work to be completed at home

The teachers were overall positive about including learners with chronic dermatological disorders in class.

Conclusion: *Communication with parents is permissible in schools.*

6.5.4 Theme 4: Behaviour of learners

Chronic dermatological disorders influence a learners' behaviour and concentration. TP1 and 2 said that the learners with chronic dermatological disorders were shy and quiet in class. However, their refusal to work in class was not because they were disobedient, but because they were shy about the scars caused by the dermatological disorder. For example, one of the learner participants were shy, which meant that she did not have any disciplinary issues at school.

Conclusion: *Chronic dermatological disorders do not necessarily cause behavioural/disciplinary problems.*

6.6 RECOMMENDATIONS

Based on the findings of the study, inclusive education, the use of social media, teacher training, and learner support are some of the recommendations for the effective learning of learners with chronic dermatological disorders.

6.6.1 Department of Education

The Department of Education's policies concerning protecting the rights of learners with chronic dermatological disorders were reviewed in Chapter 3. Based on the above, it is recommended that the Department of Education should be more vigilant in ensuring that the policies regarding inclusive education are being implemented in schools (Majoko &

Phasha, 2018:74). Additionally, training teachers on inclusive education at universities and colleges, as well as at schools, should become a priority. Teachers' qualifications should also include training in which chronic dermatological disorders are specifically addressed.

A support team for learners with chronic dermatological disorders, consisting of school teachers and members from the Department of Education, should be formed. At the district level, all stakeholders should collaborate to form the support team and make use of available resources to address the specific needs of the learners (Tuswa, 2016:42).

A pamphlet with information about dermatological disorders could be developed and distributed to teachers to help them understand the learners' situatedness. Teaching practices could then be adjusted to accommodate the specific needs of the learners. Teachers, parents and other learners will all benefit from this information.

6.6.2 Use social media to create awareness

Teachers, parents, and learners all use social media platforms such as Facebook and WhatsApp to communicate and share information. Teachers can thus create a WhatsApp group to communicate or share information with learners and their parents regarding dermatological disorder issues. Teachers can also communicate with learners or parents individually if the information is not applicable to the whole group.

Parents and teachers can also browse through Facebook to educate themselves about dermatological disorders and network with other people who are struggling with chronic dermatological disorders. Healthcare professionals are exemplary to other professions for using social media to share knowledge (Rolls, Hansen, Jackson & Elliot, 2016:166).

Learners can form their own peer support team by including other learners with dermatological disorders and sharing information and coping strategies. If learners with chronic dermatological disorders discover that there are other learners that struggle just as much, or even more, it might encourage them.

Itching can sometimes be an indication of a person's deeper emotional or spiritual problems (Shenefelt & Shenefelt, 2014:209). Learners should thus not only seek medical

help, but also make use of the support of a psychologist to solve the underlying problems that cause the dermatological disorder. It is thus recommended that the Department of Education start a support group consisting of all the role players to watch over the physical and mental health of learners with chronic dermatological disorders. The support group should consist of teachers, officials from the Department of Education, social workers, psychologists, and health workers, and their contact details should be made available to learners on all the school's social media pages.

6.6.3 Use technology to improve support

The internet is a source of information for all but can be especially useful for mental health of young people (Center for Mental Health in Schools at UCLA, 2014:16). Learners should have the opportunity to explore issues around dermatological conditions to empower them. Teachers can use computers to capture data of learners' background, disciplinary issues and reports on their health to create a complete profile of the learner. The accessibility of learners' profiles can speed up the support process should learners with a chronic dermatological disorder require assistance or support.

Additionally, teachers can use cell phones or e-mails to assist learners with their school- and homework. Additional support and tasks can be made available via these media to assist learners in their academic programme.

6.6.4 Flexible teaching strategies to accommodate learners with dermatological disorders

The first recommendation in terms of teaching strategies is that the school principal needs to add a question to the learner's profile questionnaire about whether learners have a chronic dermatological disorder. This information should then be captured, stored, and made accessible to all teachers.

Teachers must be given the responsibility of designing, supervising, and assessing the educational programmes for learners with chronic dermatological disorders. They should also be allowed to arrange for special concessions for their learners, including allowing them to finish their work at home and writing tests on a different date in the case of absence due to their dermatological disorder. The Department of Education should be

held responsible for training teachers on the procedures to be followed for concessions for learners with chronic dermatological disorders during examinations.

Teachers need to be accommodating and flexible in their teaching. Mitchell (2008:8) mentions that learners with special needs do not need special education, but rather good teaching. Good teaching implies *inter alia*:

- Slightly adjusting common strategies to fit the cognitive, emotional, or social capabilities of the learner with special needs.
- Using technology combined with other teaching techniques.
- Using multiple methods of action and expression to support strategic learning.
- Giving individual attention, providing security through a fixed routine and reinforcing positive behaviour (Potgieter-Groot, Visser & Lubbe-De Beer, 2015:65).

6.6.5 Collaboration between teachers and parents

Teachers and parents must establish trust-based, equal relationships conveying respect (Mereoiu et al., 2016:3). According to many scholars and practitioners, one of the integral parts of a collaborative partnerships between families and schools is trust (Mereoiu et al., 2016:3). The establishment of good communication between teachers and parents will allow both parties to address the needs of the learners more effectively.

An accomplished representative of the school principal should inform parents about the needs of their children, how special education systems function, rights and responsibilities of stakeholders, strategies to advocate, and how special education services can provide support (Mereoiu et al., 2016:1). Parents should be welcomed as partners in the education of the learners and not be intimidated. They should be educated about terminology that is used and their opinions must be taken into consideration.

6.7 A SECONDARY SCHOOL

The first step towards implementing inclusive education at the Secondary School would be to acknowledge that chronic dermatological disorders are debilitating to learners. Learners with debilitating chronic dermatological disorders should be identified and

referred to the SBST. Additionally, collaboration between different role players should be established to draw up an individual education plan.

SBST meetings should be allowed to take place regularly and within school hours. It should therefore be included in the timetable of the school. Information sessions about skin disorders and encouragement for learners to improve their lifestyle are possible interventions that the school's SBST could implement. The positive attitude of teachers towards learners with chronic dermatological disorders should be utilised to implement the above-mentioned steps, like drawing up individual learning plans for affected learners.

Furthermore, a kit specifically for dermatological disorders should be included in the first aid kit of the school. Learners with chronic dermatological disorders should also be allowed to use their own sanitisers to prevent aggravating their dermatological disorder.

The appointment of one counsellor at the school was an achievement for the school, as it was one out of many schools to receive help in the form of a counsellor from the department. However, this was only based on referrals made by teachers to the administrative staff, and from the administrative staff to psychologists and other stakeholders. For this school with 1 650+ learners, more teachers, classrooms, and counsellors are needed to address the health, social, and learning issues of learners in general, but also more specifically learners with chronic dermatological disorders.

According to the COVID-19 regulations, learners have to sit 1,5 m from each other, which means that only 20 learners are allowed in a class. These regulations were implemented to prevent the virus from spreading in the classrooms. The 50 to 55 learners that the teachers normally teach in a class, can thus be considered a health risk. Learners with disabilities, special needs, or health needs like chronic dermatological disorders also have a lesser chance of being identified by a teacher in bigger classes.

The daily deep-cleaning of classrooms, washing of floors, and provision of soap and sanitisers for learners are positively contributing to curbing the spread of the COVID-19 virus. Clean classrooms can prevent allergic reactions of learners with chronic dermatological disorders like eczema and should thus be implemented regardless of the pandemic. The positive aspect of COVID-19 for education was that the inequalities in

education in terms of health, sanitation, accommodation, and water were highlighted and had to be addressed immediately. These positive changes should be implemented permanently.

6.8 LIMITATIONS OF THE STUDY

The number of participants (8 learners, 5 teachers and 2 parents) was a limitation in this study. The reasons for this limitation were time and the COVID-19 pandemic. The time limitation also contributed to the fact that the study was limited to one school. It might thus not be able to generalise the findings to include other schools in the area or province.

The lack of prior research on the influence of chronic dermatological disorders on learning also made it difficult to find information. The fact that dermatological disorders are not seen as a major health issue or disability contribute to the lack of prior research about this topic. Furthermore, the questions in the questionnaire were quite general. Some of the questions could have been phrased in such a way that learners could give more specific answers. For example, not just asking if the dermatological disorder influenced their learning but also how.

The researcher, having a son with chronic dermatological disorder, could have been subjective. The researcher tried to be as objective as possible but acknowledges the fact that she unintentionally could have influenced the results.

6.9 FURTHER STUDIES

This study was limited to one school, in one town, and in one province. More studies could be done at more schools, in more towns, and in the other eight provinces. Additionally, more international studies about this subject are needed for the purpose of comparing the findings of this study.

The second limitation was that the research was limited to a secondary school. If extended to primary schools, the effect of dermatological disorders on learning can be addressed at an early stage, which can ensure the effective learning of learners with chronic dermatological disorders.

Finally, this research study only explored the experiences of learners, teachers, and parents with chronic dermatological disorders. Further studies with principals and members of the Department of Education are needed to ensure the implementation of laws concerning chronic dermatological disorders.

6.10 CONCLUSION

The research has shown that chronic dermatological disorders affect learning. Each learner must acknowledge to what extent the dermatological disorder influences their learning, but also realise that the chronic dermatological disorder should not control their lives. Resilience, consistency in treatment, positive attitudes from all role players, collaboration between role players, and prayer will ultimately result in successful learning.

The main question of this research was, “What challenges do learners with chronic dermatological disorders experience in school?" The research concludes that learners’ experiences with dermatological disorders results in tiredness, insomnia, concentration problems and irritability, which influences where they want to do their schoolwork, how much schoolwork they do, their school attendance, and their behaviour in the class, at home and amongst peers. As the experiences of learners with chronic dermatological disorders prevent the learners from working to their full potential, it can be classified as a barrier to learning. Consequently, parents and teachers are empathetic and supportive of learners with chronic dermatological disorders.

A more in-depth study about chronic dermatological disorders is needed. Questions aimed at participants should be phrased in such a way that more information about the influence of dermatological disorders on learning can be obtained. The questions should not just ask whether the chronic dermatological disorder influences learning, but also how it influences the learning, which subjects are more affected and how these subjects are affected. The influence that chronic dermatological disorders have on specific subjects is a topic that requires exploration.

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APPENDIX A: ETHICS APPROVAL

UNISA university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2020/06/10

Ref: **2020/06/10/30470064/36/AM**
Name: Mrs JE Gelderbloem
Student No.: 30470064

Dear Mrs JE Gelderbloem

Decision: Ethics Approval from 2020/06/10 to 2023/06/10

Researcher(s): Name: Mrs JE Gelderbloem
E-mail address: jjgelderbloem@gmail.com
Telephone: 072 503 7724

Supervisor(s): Name: Dr AM Moll
E-mail address: mollam@unisa.ac.za
Telephone: 012 429 4434

Title of research:

Exploration of learner, parent and educator experiences of chronic dermatological disorder as barrier to learning

Qualification: MEd 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 2020/06/10 to 2023/06/10.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2020/06/10 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.

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3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be comm unicated in writin g 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 regards 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, p rofessional 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. Second ary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2023/06/10**. Submission of a completed research ethics pro gress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2020/06/10/30470064/36/AM** *should be clearly indicated on all forms of communication with the intended research pa rticipants, as well as with the Committee.*

Kind regards,

Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
motlhat@unisa.ac.za

Prof PM Sebate
ACTING EXECUTIVE DEAN
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APPENDIX B: DOE APPROVAL

Directorate: Research

Audrey.wyngaard@westerncape.gov.za
tel: +27 021 467 9272
Fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20200506-6141

ENQUIRIES: Dr A T Wyngaard

Mrs Janine Gelderbloem
18 Stag Drive
Dellville Park
Pacaltsdorp
6534

Dear Mrs Janine Gelderbloem

RESEARCH PROPOSAL: CHRONIC DERMATOLOGICAL DISORDER AS BARRIER TO LEARNING

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **14 May 2020 till 19 March 2021**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).

7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

The Director: Research Services

Western Cape Education Department

Private Bag X9114

CAPE TOWN

8000

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 06 May 2020

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APPENDIX C: LETTER REQUESTING PERMISSION FROM A SECONDARY SCHOOL PRINCIPAL

Title of research: Exploration of learner, parent and educator experiences of chronic dermatological disorders as barrier to learning

Date: 18/07/2020

The Principal: Mr. M.P. Van Rooyen

A Secondary School

044 - 871 1194

E – mail: georgesecondary@gmail.com

Request to do research at a Secondary School

Dear Mr Van Rooyen

I, Janine Gelderbloem, am doing research under supervision of Dr. Moll, a lecturer in the Department of Psychology of Education towards a MEd degree at the University of South Africa. I hereby ask permission for eight learners, five teachers and two parents to participate in a study entitled: Exploration of learner, parent and educator experiences of chronic dermatological disorder as barrier to learning.

The aim of the study is to explore what learners with chronic dermatological conditions experience at school and at home. Your school has been selected to be part of this research based on fact that the researcher is a teacher at the school. Your school has been selected because of easy accessibility for the researcher to the participants.

The study will entail the completion of a questionnaire by eight grade 10-11 learners, two interviews with parents who have children with chronic dermatological disorder and interviews within a focus group with five teachers about their contribution towards learners with chronic dermatological conditions.

The benefits of this study are that a platform is created for learners to share their experiences about their dermatological conditions at school and home. Parents will be able to share their experiences with their children with chronic dermatological conditions. The teachers will be able to examine how they can support learners with chronic dermatological conditions.

Potential risks are that learners or parents might be reminded of difficult times during their experiences with chronic dermatological conditions while answering the questions. In the case of emotional outbursts, referral to the school counsellor or school psychologist will be done. The learners, teachers and parents will be treated with the necessary respect and sympathy. They will not be forced to answer questions that make them feel uncomfortable.

The participants will voluntarily take part in the research. Participation in the research will be confirmed with signing of a consent and assent form. They also have the right to withdraw from the research at any time.

The information gathered through research from the participants, will be treated confidentially. It will be stored in a save place at the researcher's residence. The participants will remain anonymous. The researcher, supervisor and transcriber will be the only people that would have access to this personal information.

There will be no reimbursement or any incentives for participation in the research.

Feedback procedure will entail the availability of written reports to every participant.

Yours sincerely

_____

Janine Gelderbloem

Teacher at a Secondary School

APPENDIX D: PARTICIPANT INFORMATION FOR LEARNERS

Date: June 2020

Title: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning

DEAR PROSPECTIVE PARTICIPANT

My name is Janine Gelderbloem and I am doing research under the supervision of Dr. Moll, a lecturer in the Department of Psychology of Education, towards a MEd degree at the University of South Africa. We are inviting you to participate in a study entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could establish the extent to which learners with a chronic dermatological condition experience it as a barrier to learning and to document how the parents with children with chronic dermatological conditions are affected. The research is also to investigate the effects of a dermatological condition on the learners' behaviour in class. It is an investigation on how health policies for South African schools make provision for learners with dermatological conditions. The research is also to identify methods for teachers to help learners with dermatological conditions to cope with challenges that they experience in the classroom.

WHY AM I BEING INVITED?

The researcher wants to create a platform for learners with chronic dermatological conditions to express their experiences at school and at home. Learners with chronic dermatological conditions were asked to participate in the research. I obtained your contact details from your class teacher.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves answering a questionnaire. Most of the questions directed to the participants will be open-ended questions that will allow the eight participants to extensively explain their experiences. The allocated time for completing the questionnaire are 45 minutes. The questionnaire will be done electronically. The participants will receive the questions on their phone. The completed questionnaires have to be returned to the researcher.

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. If you do decide to take part, you will be given this information sheet to keep. An assent form must be signed by you and your parents if you are younger than 18 years old. The names of participants will not appear on questionnaires.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The learners with chronic dermatological conditions will be able to share their experiences. Parents with children with chronic dermatological conditions will be able to share their experiences. They can also establish good relationships with teachers. The teachers will be able to examine how they can accommodate these learners in the classroom. There is no guarantee that learners will immediately be accommodated or understood by all the teachers in the school. The learners, parents and teachers participating in the research forms part of a community. If participants learn something from the research, it can be shared with the community.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The information required from the participant is personal and about their experiences at school and at home. The nature of the research topic lends itself towards learners becoming emotional about experiences. Emotional outbursts or any other response

during research can be minor or severe depending on the intensity of the participants' experiences. The researcher will refer the participants to the school counsellor.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist on confidentiality, meaning 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. The questionnaires of the eight learner participants will be coded and you will be referred to the code 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. You will remain anonymous because you will be using a code on your questionnaire. The transcriber and external coder will maintain confidentiality by signing a confidentiality agreement.

A report of the study may be submitted for publication in research, journals, or other conference proceedings, but individual participants will not be identifiable in such a report.

HOW WILL THE RESEARCHER PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored at the researcher's residence for a period of five years in a locked filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer. Copies will be permanently deleted from the hard drive of the computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

Participation is voluntarily, meaning that there will be no remuneration for participation in this research.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the CEDU, 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 Janine Gelderbloem on 072 503 7724 or email jjgelderbloem@gmail.com. The findings are accessible for one year after submission of findings.

Should you require any further information, want to contact the researcher about any aspect of this study or have concerns about the way in which the research has been conducted, please contact the researcher at jjgelderbloem@gmail.com or 072 503 7724.

Thank you for taking time to read this information sheet and for participating in this study.

_____

Janine Gelderbloem

APPENDIX E: PARTICIPANT INFORMATION FOR PARENTS

Date: June 2020

Title: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning.

DEAR PROSPECTIVE PARTICIPANT

My name is Janine Gelderbloem and I am doing research under the supervision of Dr. Moll, a lecturer in the Department of Psychology of Education, towards a MEd degree at the University of South Africa. We are inviting you to participate in a study entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could establish the extent to which learners with a chronic dermatological condition experience it as a barrier to learning and to document how the parents with children with chronic dermatological conditions are affected. The research is also to investigate the effects of dermatological condition on the learners' behaviour in class. It is an investigation on how health policies for South African schools make provision for learners with dermatological conditions. The research is also to identify methods for teachers to help learners with dermatological conditions to cope with challenges that they experience in the classroom.

HY AM I BEING INVITED?

Parents who have children with chronic dermatological conditions were asked to take part in the research. The parents will be able to express their experiences with children with chronic dermatological conditions. The parents will have an opportunity to establish a good relationship with teachers that will help with the learning of their children.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves semi-structured individual interviews with two parents. Most of the questions directed to you will be open-ended questions that will allow you to extensively explain your experiences. The allocated time for the interviews with parents will be 60+ minutes. The interviews will be done telephonically.

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. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The learners with chronic dermatological conditions will be able to share their experiences in the classroom and at home. Parents with children with a chronic dermatological condition will be able to share their experiences and discover ways of communicating with teachers. The teachers will be able to examine how they can accommodate these learners in the classroom. There is no guarantee that learners will immediately be accommodated or understood by all the teachers in the school. Learners and parents will have a chance to share their experiences. The learners, parents and teachers participating in the research forms part of a community. If participants learn something from the research it can be shared with the community.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The parents are the non-vulnerable adult participants. The information required from the participant might be sensitive and personal. The parents might be reminded of frustrating and difficult times that they experienced with their children.

The researcher will show sympathy towards the parents during the interviews.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist on confidentiality meaning that your name will not be recorded anywhere and that no one, apart from the researcher, will know about your involvement in this research. The researcher will make use of a code to identify the parents. You will be referred to a code in the interviews, the data and 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. You will remain anonymous because you will be using a code during the interviews. The transcriber and external coder will maintain confidentiality by signing a confidentiality agreement

A report of the study may be submitted for publication in research, journals, or other conference proceedings, but individual participants will not be identifiable in such a report.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored at the researcher's residence for a period of five years in a locked filing cabinet 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. Copies will be permanently deleted from the hard drive of the computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

Participation is voluntarily, meaning that there will be no remuneration for participation in this research.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the CEDU, 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 Janine Gelderbloem on 072 503 7724 or email jjgelderbloem@gmail.com. The findings are accessible for one year after submission of findings.

Should you require any further information, want to contact the researcher about any aspect of this study or have concerns about the way in which the research has been conducted, please contact the researcher at jjgelderbloem@gmail.com or 072 503 7724.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

_____

Janine Gelderbloem

APPENDIX F: PARTICIPANT INFORMATION FOR TEACHERS

Date: June 2020

Title: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning.

DEAR PROSPECTIVE PARTICIPANT

My name is Janine Gelderbloem and I am doing research under the supervision of Dr. Moll, a lecturer in the Department of Psychology of Education, towards a MEd degree at the University of South Africa. We are inviting you to participate in a study entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could establish the extent to which learners with chronic dermatological conditions experience it as a barrier to learning and to document how the parents with children with chronic dermatological conditions are affected. The research is also to investigate the effects of dermatological disorder on the learners' behaviour in class. It is an investigation on how health policies for South African schools make provision for learners with dermatological conditions. The research is also to identify methods for teachers to help learners with dermatological conditions to cope with challenges that they experience in the classroom.

WHY AM I BEING INVITED?

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

You are invited because you are a teacher at the school. Five teachers were chosen to participate in the research. I obtained your contact details from the principal.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves a case study consisting of an interview within a focus group with teachers. Most of the questions directed to the participants will be open-ended questions that will allow you to extensively explain your experiences. The allocated time for the interviews with teachers will be 60+ minutes. The interview will be done at the school.

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. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent. The real names of participants will not be used during the interviews. The researcher will make use of codes to identify the participants.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The learners with chronic dermatological conditions will be able to share their experiences in the classroom and at home. Parents with children with chronic dermatological conditions will be able to share their experiences and discover ways to establish a good relationship with teachers. The teachers will be able to examine how they can accommodate these learners in the classroom. There is no guarantee that learners will immediately be accommodated or understood by all the teachers in the school. Learners and parents will have a chance to share their experiences. The learners, parents and teachers participating in the research forms part of a community. If participants learn something from the research it can be shared with the community.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The teachers are the non-vulnerable adult participants. The information required from the participant is not sensitive.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist on confidentiality, meaning that your name will not be recorded anywhere and that no one will know about your involvement in this research. You will be given a code 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. You will remain anonymous because you will be using a code during the interview. The transcriber and external coder will maintain confidentiality by signing a confidentiality agreement.

A report of the study may be submitted for publication in research, journals, or other conference proceedings, but individual participants will not be identifiable in such a report.

This focus group is a group of willing teachers that will be chosen from the staff of the school to share how they think they can accommodate learners with chronic dermatological conditions. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason, I advise you not to disclose personally sensitive information in the focus group.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored at the researcher's residence for a period of five years in a locked filing cabinet 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. Copies will be permanently deleted from the hard drive of the computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

Participation is voluntarily, meaning that there will be no remuneration for participation in this research.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the CEDU, 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 Janine Gelderbloem on 072 503 7724 or email jjgelderbloem@gmail.com. The findings are accessible for one year after submission of findings.

Should you require any further information, want to contact the researcher about any aspect of this study or have concerns about the way in which the research has been conducted, you may contact the researcher at jjgelderbloem@gmail.com or 072 503 7724.

Thank you for taking time to read this information sheet and for participating in this study.

_____

Janine Gelderbloem

APPENDIX G: ASSENT FORM FOR LEARNERS

Date: 18/07/2020

Title of research: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning

Dear Learner

I am doing research entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning. Your principal has given me permission to do this study in your school. I would like to invite you to be a very special part of my study. I am doing this study so that I can find ways for you to express your experiences with a chronic dermatological condition.

This letter is to explain to you what I would like you to do. There may be some words you do not know in this letter. You may ask me or any other adult to explain any of these words that you do not know or understand. You may take a copy of this letter home to think about my invitation and talk to your parents about this before you decide if you want to be part of the study.

I would like to ask you questions about your experiences with a chronic dermatological condition. Answering the questions will take no longer than 45 minutes. The questionnaires will be done electronically. I will send the questions to your phone. After completing the questions, you are expected to send it back to the researcher.

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PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

I will write a report on the study but I will not use your name in the report or say anything that will let other people know who you are. Participation is voluntary and you do not have to be part of this study if you don't want to take part. If you choose to be in the study, you may stop taking part at any time without penalty. You may tell me if you do not wish to answer any of my questions. No one will blame or criticise you. When I am finished with my study, I will have a written report available for you to read about some of the helpful and interesting things I found in the study.

The benefits of this study are that the research might create awareness of chronic dermatological conditions as barrier to learning and lead to the improvement of the learning of learners with chronic dermatological conditions. Potential risks are that learners can be reminded of difficult experiences with a chronic dermatological condition. This can lead to emotional reactions from learners. You will not be reimbursed or receive any incentives for your participation in the research.

If you decide to be part of my study, you will be asked to sign the form on the next page. If you have any other questions about this study, you can talk to me or you can have your parent or another adult call me, Janine Gelderbloem, at 072 503 7724.

Do not sign the form until you have all your questions answered and understand what I would like you to do. Do not sign the written assent form if you have any questions. Ask your questions first and ensure that someone answers those questions.

WRITTEN ASSENT

I have read this letter which asks me to be part of a study at my school. I have understood the information about the study and I know what I will be asked to do. I am willing to be in the study.

_____ _____ _____

Learner's name(print): Learner's signature: Date:

_____ _____ _____

Witness's name (print): Witness's Signature: Date:

(The witness is over 18 years old and present when signed.)

_____	_____	_____
Parent/guardian's name (print):	Parent/guardian's signature:	Date:

_____	_____	_____
Researcher's name (print):	Researcher's signature:	Date:

APPENDIX H: PARENTAL CONSENT FORM FOR MINORS TO PARTICIPATE IN STUDY

DEAR PARENT

Your son/daughter is invited to participate in a study entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning. I am undertaking this study as part of my Master's research at the University of South Africa. The purpose of the study is to create a platform for learners with a chronic dermatological condition to share their experiences at school and at home, for parents to share their experiences, and for teachers to explore avenues of how to help learners with chronic dermatological condition.

The possible benefits of the study are the improvement of learning for learners with chronic dermatological disorders. I am asking permission to include your child in this study because I think it can help them to share their experiences with the dermatological condition. I expect to have eight children participating in the study.

If you allow your child to participate, I shall request him/her to:

- Take part in completing a questionnaire consisting of open-ended questions. The researcher will be available telephonically should questions need to be explained to the learners. The open-ended questions will be in English. The questionnaires will be done electronically.
- Any information that is obtained in connection with this study and can be identified with your child will remain confidential and will only be disclosed with your permission. Their responses will not be linked to their name or your name or the

school's name in any written or verbal report based on this study. Such a report will be used for research purposes only.

There are no foreseeable risks to your child by participating in the study. If, however, there are any risks involved in the study, learners will be referred to a professional. Your child will receive no direct benefit from participating in the study. However, the possible benefits to education are that the research might create awareness of chronic dermatological conditions as barrier to learning. Neither your child nor you will receive any type of payment for participating in this study.

Your child's participation in this study is voluntary. Your child may decline to participate or withdraw from participation at any time. Withdrawal or refusal to participate will not affect them in any way. Similarly, you can agree to allow your child to be in the study now and change your mind later without any penalty.

The study will be done electronically with the prior approval of the school and your child. In addition to your permission, your child must agree to participate in the study and you and your child will also be asked to sign the assent form that accompanies this letter. If your child does not wish to participate in the study, they will not be included and there will be no penalty.

The information gathered from the study and your child's participation in the study will be stored securely on a password locked computer in my locked office for five years after the study. Thereafter, records will be erased.

The benefits of this study are a platform for learners and parents to express their experiences about chronic dermatological conditions and for teachers to discover how they can accommodate these learners in class.

Potential risks are that learners and parents can be reminded of difficult times experienced with chronic dermatological conditions.

There will be no reimbursement or any incentives for participation in the research.

If you have questions about this study, please ask me or my study supervisor, Dr. Moll, at the Department of Education of Psychology, College of Education, University of South Africa. My contact number is 072 503 7724 and my e-mail is jjgelderbloem@gmail.com. The e-mail of my supervisor is Mollam@unisa.ac.za. Permission for the study has already been given by the principal and the Ethics Committee of the College of Education, UNISA.

You are making a decision about allowing your child to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow him or her to participate in the study. You may keep a copy of this letter.

Name of child: _____

_____ _____ _____

Parent/guardian's name (print): Parent/guardian's signature: Date:

_____ _____ _____

Researcher's name (print): Researcher's signature: Date:

APPENDIX I: CONSENT FORM FOR PARENTS PARTICIPATING IN THE STUDY

Date: 25/06/2020

DEAR PARENT

You are invited to participate in a study entitled: Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning. I am undertaking this study as part of my Master's research at the University of South Africa. The purpose of the study is to create a platform for learners with chronic dermatological conditions to share their experiences at school and at home. You as parent can also share your experiences with children with chronic dermatological conditions. Teachers will be able to explore avenues of how to help learners with chronic dermatological conditions.

The possible benefit of the study is the improvement of learning for learners with chronic dermatological conditions. You would also be able to express concerns about how this dermatological condition influences your child's learning. The study is also aimed at finding ways in which you can work together with teachers to improve your child's learning in class.

Two parents will be interviewed. The interviews will be done individually. The duration of the interviews will be 60+ minutes. If you participate, I shall request you to take part in an interview. Arrangements will be made to do these interviews telephonically. The questions will be explained to you.

Any information that is obtained in connection with this study and can be identified with you will remain confidential and will only be disclosed with your permission. Your responses will not be linked to your name or the school's name in any written or verbal report based on this study. Such a report will be used for research purposes only.

There are no foreseeable risks to you by participating in the study. If, however, there are any risks involved in the study, you will be referred to a professional. You will receive no direct benefit from participating in the study; however, the possible benefits to education are that the research might create awareness of chronic dermatological conditions as barrier to learning.

Your participation in this study is voluntary. Withdrawal or refusal to participate will not affect you in any way. Similarly, you can agree to be in the study now and change your mind later without any penalty.

You will also be asked to sign the consent form. The information gathered from the study and your participation in the study will be stored securely on a password locked computer in my locked office for five years after the study. Thereafter, records will be erased.

The benefits of this study are a platform for learners and parents to express their experiences about chronic dermatological conditions and for teachers to discover how they can accommodate these learners in class.

A potential risk is that parents can be reminded of difficult times experienced with chronic dermatological condition.

If you have questions about this study please ask me or my study supervisor, Dr. Moll, at the Department of Psychology of Education, College of Education, University of South Africa. My contact number is 072 503 7724 and my e-mail is jjgelderbloem@gmail.com. The e-mail of my supervisor is Mollam@unisa.ac.za. Permission for the study has already been given by the Principal and the Ethics Committee of the College of Education, UNISA.

You are making a decision about you participating in this study. Your signature below indicates that you have read the information provided above and have decided to participate in the study. You may keep a copy of this letter.

_____	_____	_____
Parent name (print):	Parent signature:	Date:
_____		_____
Researcher's name (print):	Researcher's signature	Date:

APPENDIX J: TEACHERS' CONSENT AND CONFIDENTIALITY AGREEMENT FOR THE FOCUS GROUP INTERVIEW

I_____ grant consent that the information I share during the focus group may be used by Janine Gelderbloem for research purposes. I am aware that the interviews will be digitally recorded and grant consent for these recordings, provided that my privacy will be protected. I undertake not to divulge any information that is shared in the interviews to any person outside the group in order to maintain confidentiality.

Participant's Name (Please print): _____

Participant's Signature: _____

Researcher's Name: (Please print): Janine Gelderbloem

Researcher's Signature: _____

Date: _____

APPENDIX K: LEARNER QUESTIONNAIRE

Learner code: ……

Grade: ……

Gender: …….

Complete the following questions to the best of your ability. Use as much time as you need. You are expected to be honest when answering the questions. Do not hesitate to contact the researcher for help if you do not understand any of the questions.

1. What kind of dermatological condition do you suffer from?
   ……..

2. Describe how your skin looks during an onset of your dermatological condition.
   ……..
   ……..

3. How does the change in your skin make you feel?
   ……
   …….

4.How does the dermatological condition affect your

4.1 School work…….
   ……..

4.2 School attendance…….
   ……..

4.3 Behaviour in class…….
   ……..

4.4 social interaction with your peers
   ……..

……..

4.5 emotional health.....

……..

……..

5. Describe the treatment that you receive from teachers when you experience some of the consequences of the chronic dermatological condition for example fatigue/tiredness.

5.1 Positive.....

……

……

5.2 Negative…….

……

……

6. Why is it important/or not important for your teachers to know about your chronic dermatological condition?.....

……

7. Describe the support that you receive from your parents during flare-ups of your dermatological condition.

7.1Emotionally…….

……

7.2 Academically…….

……

7.3 Spiritually……

……

7.4 Medically……

……

……

8. Describe people' s first reaction to your skin condition?

   .....

   ……

   ……

9. How has the chronic dermatological condition that you are experiencing improved or deteriorated over the years?

   ……

   ……

   ……

10. Why would/or would you not describe your chronic dermatological condition as hereditary?

    ……

    ……

    ……

11. What do you think will help you to cope better with your chronic dermatological condition?

    ……

    ……

    ……

12. What can your teachers do to help you to cope better with your chronic dermatological condition?

    ……

    ……

    ……

13. What can your parents do to help you to cope better with your chronic dermatological condition?

    ……

……

14. What can your siblings do to help you to cope better with your chronic dermatological condition?

……

……

……

15. What can your friends do to help you to cope better with your chronic dermatological condition?

……

……

……

16. What advice can you give to other learners with a chronic dermatological condition?

……

……

……

APPENDIX L: QUESTIONS FOR PARENTS

1. What is wrong with your child's skin?
2. Since when does your child have the dermatological condition?
3. What kind of dermatological condition does your child have?
4. What are the symptoms that your child experience during an onset of their condition?
5. What procedures do you follow when your child experience this dermatological condition?
6. Would you say that you have this condition under control?
7. Have you been to a doctor with your child?
8. Have you been referred to a dermatologist?
9. What medication does your child use?
10. How does this dermatological condition influence your child's learning?
11. How does this dermatological condition influence your family?
12. Have you informed the teacher or principal about your child's dermatological condition?
13. Does your child complain about not coping with schoolwork?
14. How does the dermatological condition of your child influence your finances?
15. Do you think it is necessary for the teachers to know about your child's dermatological condition?
16. Do you feel that your child should be treated different because they have a dermatological condition?

APPENDIX M: QUESTIONS FOR TEACHERS

1. How many years have you been teaching at this high school?
2. In the years that you are teaching, have you ever seen learners with any dermatological condition?
3. Do you teach a learner who suffers from a dermatological condition this year?
4. How does this learner behave in class?
5. Does the learner with a chronic dermatological condition complete their work in class?
6. Does the learner with a chronic dermatological condition complete their work at home?
7. Does the learner with a dermatological condition show any lack of concentration in class?
8. Do you think that a learner with a chronic dermatological condition must be treated differently than other learners in class?
9. What do you think can be done by you as teacher to help the learner with chronic dermatological condition?

9.1 to improve his/her concentration in class
9.2 to be more motivated
9.3 to complete work in class
9.4 to complete work at home
9.5 to interact with learners in class
9.6 to ensure a good self-image
9.7 to ensure good communication with learner
9.8 to ensure good communication with the parent
9.9 to stay up to date with the laws concerning healthcare at schools

APPENDIX N: TRANSCRIPTION OF PARENT INTERVIEWS

PP1 Interview transcription	Main Points
PP1: Good afternoon.	
Researcher: Okay, for the duration of this interview, I will, I will refer to you as Parent Participant 1.	
PP1: Okay, that's fine.	
Researcher: Thank you for participating in the interview. I really appreciate it. The aim of the research is to create an opportunity for parents to share their experiences with their children uhm who has a chronic dermatological condition. And then we would also like to find ways of how parents and teachers can work together to ensure effective learning for the children.	
Okay, so we gonna start with the questions now.	
What is wrong with your child's skin?	
PP1: He has eczema.	Type of disorder: eczema
Researcher: And since when do your child have eczema?	
PP1: Since he was a baby.	

Researcher: Okay, a uhm what are the symptoms that your child experience during an onset of the eczema?	
PP1: It's mostly itchiness, redness of the skin, and then dry skin.	Symptoms: Red, itchy, dry
Researcher: Okay, and then what procedures do you follow when, when your child experience the eczema?	
PP1: I normally get Allergy medication from the chemist and then skin ointment that they mix for me at the chemist.	Treatment: Medication, lotion
Researcher: Okay, so would you say that you have the condition under control?	
PP1: Yes, most of the time. Mostly under control.	Treatment: under control
Researcher: Have you been to a doctor with your child for the eczema?	
PP1: Yes, I have.	Medical: Doctor
Researcher: Okay, and have they referred you maybe to a dermatologist?	
PP1: No.	
Researcher: You said you using cream, but is there anything else except the cream that you are using for your child?	

PP1: The allergy pill Fenegin ja, and then there is mos the special soapie for the skin to wash.	Skin care: Fenegin,soap
Researcher: How does the dermatological condition influence your child's learning?	
PP1: I'd say it's mostly concentration.	Influence on learning: Learning concentration
Researcher: Okay, he doesn't concentrate in class. Is that what you saying?	
PP1: Yes. Yes.	
Researcher: How does the dermatological condition influence you, and your family?	
PP1: It's frustrating because, ja we've got another child that has eczema and I'm also struggling with it. It's mostly frustrating when one of us has a outbreak.	Influence on family: Frustrating, genetics, sibling has eczema
Researcher: Have you informed the principal or your child's teacher about the eczema?	
PP1: Not inform teachers.	
Researcher: Does the child complain about not coping with schoolwork when he has an onset of eczema?	
PP1: Its mostly concentration problem, especially when he has eczema, his skin is dry and itchy.	Learning; concentration

Researcher: How does the dermatological condition influence your finances?	
PP1: A lot because the ointment that I get at the chemist is a special ointment that they mix for, for him and it is quite expensive and then he need a certain soap to wash himself and so ja its expensive.	Finances: Expensive
Researcher: Do you think it is necessary for the teachers to know about your child's eczema?	
PP1: I didn't think it was until now.	Collaboration with teachers: Unaware
Researcher: Do you feel your child should be treated different because of the eczema?	
PP1: No, I don't think so no.	No difference in treatment
Researcher: Thanks a lot for taking part in this interview. We usually write a report and uhm it will be available to you or I will send it to you. Thanks	
PP1: My pleasure.	
PP2 Interview Transcription	
Researcher: Good afternoon sir.	
PP2: Good afternoon mam.	

Researcher: For the duration of this interview, I will refer to you as Parent Participant 2. The aim of the research is to give the the parents an opportunity to share their experiences with their children who has chronic dermatological conditions and also to find ways how teachers and parents can work together towards the best learning or the most effective learning of their children.	
Researcher: what is wrong with your child's skin?	
PP2: My son, he has eczema.	Type of disorder: Eczema
Researcher: Since when does he have eczema?	
PP2: He has eczema since, since he was born.	Birth
Researcher: Okay, and then what are the symptoms that your child experience during an onset of his eczema?	Birth
PP2: He will have, uhm, itchy skin. He will have, uhm, also his skin will also crack open. He will, uhm, really scratch a lot, specifically, in his, uhm, between his knees and his elbows and also the eyes as well.	Appearance: Itchy, cracked
Researcher: And then what procedures do you follow when your child experiences, the onset of, eczema?	

PP2: He has a soap that he bath in and then also, he also have, uhm, also ointment that we put on his skin.	Skin care: Soap, ointment
Researcher: Okay. And would you say that his condition under control now?	
PP2: Ja, his condition is under control.	Skin care: Effective, under control
Researcher: Have you been to a doctor with your child's skin?	
PP2: Yes, we went to our house doctor.	Skin care: Doctor
Researcher: Okay, and then did he refer you perhaps to a dermatologist?	
PP2: Yes, he did refer us to a dermatologist.	Skin care: Dermatologist
Researcher: Okay, and then what medication does your child use?	
PP2: He use for specifically to, for his skin we have a cream that we get from that is mixed at the chemist that he use. And then also, he also had an injection quite a few times at the doctor. He also, also have Advantan cream that we put on for him.	Skin care: Cream mixture, injection , Advantan
Researcher: Okay, and how does the dermatological condition influence your child's learning?	
PP2: It is very difficult for him specifically to concentrate and then also because he doesn't get enough sleep because he scratch at night.	Learning: Concentration, tired

He is normally tired in the morning. He does not want to wake up. He actually doesn't want to go to school.	
Researcher: Okay, how does the condition or skin condition influence you and your family?	
PP2: For us as a family because we also have another daughter that also have uhm eczema. It is very difficult. We always have to consider where we go and also sometimes if he has severe eczema, when its severe we can't go out because they don't feel like going out.	Influence on family: Genetics, sibling also has eczema
Researcher: Okay, and then have you informed his teacher or the principal about his eczema?	
PP2: When he was in primary school we informed the, the teachers but he his coping better with it in high school.	
Researcher: Okay. Does your child complain about not coping with his schoolwork?	
PP2: Uhm, sometimes he, he … because he's tired, uhm, he says that he can't. Maybe when he has to write something from the blackboard, it's very difficult for him. He's working slowly. For him, sometimes he feels that he doesn't have energy. So yes it does impact on his schoolwork and it makes it difficult for him.	Influence on schoolwork: Work slowly, no energy

Researcher: How does the dermatological condition of your child influence your finances?	
PP2: Well, obviously it is quite expensive to have all the creams. And that we buy on a monthly, we sometimes buy monthly, uhm, we buy that. It is also very hard on our medical aid. There were a few times that, because of him going so many times to the doctor, that we couldn't go, uhm, because, he actually depleted our benefits.	Finances: Expensive
Researcher: Do you think it is necessary for the teachers to know about your child's eczema?	
PP2: Yes, because I think sometimes it will looks that my son is not interested in doing something but it's not really that. It's just because he is concentrating on the itching and, as I've said, he is tired because then he didn't sleep through the night and also sometimes it is just so irritating for him as well, which makes it very difficult for him.	Collaboration with teacher: Active
Researcher: Do you think your child should be treated different because he has eczema?	
PP2: I don't think he must be treated differently. But just the, uhm, I think teachers, uhm, must have understanding for, for his condition. Uhm he have to work hard, he have to study, he have to complete his work but I do think that by just giving him that, just having that understanding,	Treatment from teachers: Understanding

that support. We always encourage him to speak to the teachers when he's, when he's not coping. So then we wish that the teachers would really understand him.	
Researcher: Okay, thanks a lot for participating in the interview. I really appreciate it and we usually write a report on the research that we do and that I will make available to you to read if you are interested. Thank you.	
PP2: Pleasure.	

APPENDIX O: TRANSCRIPTION OF FOCUS GROUP INTERVIEW

Introduction of teachers	
Researcher: Okay. Good afternoon colleagues! We are going to start with the interview now. Thanks for participating, I really appreciate it. The aim of the interview is to explore ways in which teachers can help learners with chronic dermatological disorders or conditions in the classroom. So just to relax a bit, we are going to start by introducing ourselves by your codename. and not your real name. So we are going to start here on my right.	
TP2: I am TP2. I am a Mathematics teacher for grade nines. I am here for the last six years at this school.	
TP1: I amTP1. I have been teaching at this particular school for the last 10 years and I'm a history teacher.	
TP3: I am TP3. I've been teaching for 12 years. I teach Afrikaans Home Language for Grade 11 and Grade 12. I've been suffering from a skin disorder for more than 36 years.	Teacher experience: Has eczema
TP5: I am TP5, and I've been teaching for almost eight years now. And I teach Business Studies and Accounting.	Teacher experience: Has eczema
TP4: Good afternoon colleagues. I am TP4 sorry. Uhm, I am teaching Mathematics for	Teacher experience: Has eczema

grade nines and tens. This is my second year at this Secondary School.	
Researcher: In the years that you have been teaching, have you ever seen learners with any chronic dermatological disorders?	
TP2: I am TP2, haven't recently been in contact with a learner but previous year I met a learner that had eczema on her hands.	Experiences: Taught learner with eczema
TP 1: In the 10 years that I am teaching at this school, I only encountered once a learner with dermatological condition on her hands and it was quite severe for the time that I saw her but after treatment became a bit better.	Experiences: Taught learner with dermatological condition
Researcher: How did the learner behave in classroom, the learner that had this condition Miss Black?	
TP2: My experience was that she was very shy. She did not want to work in class because she did not want to expose hands and let her friends see that her hands were not well. That made her to be shy in class.	Behaviour in class: Shy, good
TP1: In my situation, the learner was also a bit shy but, uhm, she coped, for the time being. She coped a bit better in terms of you know personal, uhm, but there was no effect that it had on her schooling.	Behaviour in class: Shy, coped

Researcher: Did the learners that, uh, experience the chronic dermatological condition, did they complete their work in class or even at home?	
TP2: TP2 in my experience was that the learner didn't want to work in class, but she usually worked better at home because her homework was always done. So I think that she didn't want her friends to know so that's why she did not want to work in class but the next day her work was usually done.	Concessions: Work finished at home
TP1: TP1 The learner herself, in my class her work was always up to date. And just like TP2 said, they work better at home instead of exposing themselves uhm in class.	Concessions: Work complete but work better at home
Researcher: Did that learner show any lack of concentration in class?	
TP1: In my class, no she enjoyed the subject and she were one of my top students well.	Learning: No lack of concentration
TP2: In my experience that the learner was always quiet so I am not sure if that was a sign of of lack of concentration, lack of shyness. Maybe that was just part of how she is as a person but, uhm, when I usually ask her questions in class she would answer that. So I don't think she had a lack of concentration in class.	Behaviour: Shy, quiet Learning: No lack of concentration

Researcher: Okay. Do you think that a learner with chronic dermatological condition must be treated differently than than other learners in class? Any of the others that wants to answer that?	
TP4: I think it depends on the condition itself. For example, mine, I also have a chronic dermatology condition but my concentration is perfectly fine. It depends on what chronical illness that person have. My sister's daughter, she has got the the one that her joints hurts and sore. She can't write. She's shy. So for me it depend on what dermatological condition.	Treatment: Depend on severity of skin
Researcher: So you saying the severity determine the … of chronic dermatological condition?	
TP4: I think the dermatologists categorise the stages of illness that person has.	
Researcher: What can be done by the teacher to help the learner with chronic dermatological condition to improve their concentration in class?	
TP5: I think teachers should motivate their learners that it is not an illness. It can be treated. I think teachers should treat them the same as other learners, and that is my point of view.	Motivation
Researcher: And then what do you think what can be done by the teachers for the learners	

with chronic dermatological disorders to be more motivated in class?	
TP1: In my class, the learner in my class, uhm, I gave her a bit advice as to how to treat her, some local what do you call it, remedies. And just maybe to improve her confidence in class, concentration as well, about that this thing can't basically keep you behind and what is important is her studies and that she can overcome. If she feels better inside then she will be a stronger person, maybe towards preparing her work, homework, studying and stuff like that. And also, that she is not the only one that have a condition like this. There is many other people and maybe the severity of her a condition at that particular time where other people or other type of learners maybe have it more worse than what she has. For now, hers is at last a bit treatable and she can overcome it as she grows older. It could be improving, or it could get worse.	Advice, Motivation
TP4: For me, I think will make a topic of it to speak to the whole class about this illness. What the cause of this illness is, for example, in many cases for this chronical condition is where your immune-stelsel is attacking your cells, especially the the cells who's got a function in your body in some cases. In my case its attacking my cells who is giving me the colour of my skin, and in other cases that's why I, I said earlier that the doctor or dermatologist	Educate, topic

categorises the illness, in some cases it's attacking the liver, the functions of the liver. And that is actually dangerous. The dermatologist will give you something or prescribe something that will lower your immune stelsel but the negative effect is that you get sick quickly so I will talk to them about that.	
Researcher: Okay, so you will motivate them. What can be done by the teacher to help the learners with the dermatological condition to complete their work in class or at home for instance?	
TP4: I know that TP5 said that all kids must be treated the same. I think in some cases that's impossible, for example, especially when some kids need to be finished at that time, that person can't be finish at that time. So for that child or learner I will then minimise the work on that stage or I will communicate with the parents that they can finish the work then at home.	Learning Concession: Less work, complete at home
TP1: I would give some extra time for finishing our activities. And in case of a test and the learner informs the educator that about the condition and maybe the reason for being absent the day the test was written and you can maybe just give another date for the learner to rewrite the test when the learner is a bit better and able to write.	Concessions: Rewrite tests, extra time

Researcher: Then what can we as teachers do to help this learner to ensure that they have a good self-image?	
TP5: I am just going to go a bit personal here. As a high school learner, I suffered from acne since grade 9 that had a big effect on my self-image and my self-confidence. I think the reason being, your peers and teachers as well. They made it seem like that you've got this illness like AIDS or something. They didn't really want to come in contact with you So that had a big negative effect on my self-image. I did my schoolwork to the best of my ability but I was never the person to stick up his hand and give an answer or even ask a question.	Teacher experience: Acne
Researcher: Okay, so how do you think, how that experience that you had, how can you help the learner with the same or more or less the same condition in class?	
TP5: Yes, that's just exactly.	
Researcher: Just to improve their self-image?	
TP5: A learner with acne for example must know it's only an illness. It can be treated. It's not a death sentence. It's nothing to be shy. It can be treated. So as a teacher I would teach all the other learners to respect this learner and also let them know it's not a death sentence,	Education: Learners

don't judge other people. I will be on the side of the learner.	
Researcher: Okay, so what, what I hear you saying, we should also educate the other learners about the condition.	
TP5: Yes, that's what I say.	
Researcher: So what do you think as a teacher, what can we do to ensure there is a good communication with the learner and also good communication with the parents?	
TP5: Communication. We live in an age of technology. Information is available to anybody. So, I will search for information and I will send it to the parents and to the learners for self-study. I will use communication channels like WhatsApp, Facebook, to communicate these information I found on the internet about the condition.	Education: Social media technology, WhatsApp, Facebook, internet
TP1: In my situation, after I've spoken to the learner about the condition and told her of the types of medication she could use, she conveyed that to her parent and her mother got her this type of medication and it helped a bit for her. It was more a positive. I see the communication that was between as being positive. It was able to at least help her during exam time complete her work and it lessened the condition on her hands.	Advice, Remedies, Positive

TP3: What I did, I used my own situation. I am still in search, the whole time for a remedy to cure this whole eczema. So the info that I had, I send it to the parents we used to talk in class. I used to educate the children in class, “listen here I am not dying. I am proud of my warrior scars, the eczema, and it doesn’t define me as a person and that made me excel at school.” I had a learner with eczema around the mouth. And when she had to do like oral, I’ll take her after school but then I’ll give her remedies to use for the eczema. I communicated with the parents and with her via SMS, via a letter, and when I get information, I’ll send to the parents.	Education Concession: Do oral after school Collaboration: SMS, letter
Researcher: Okay, the last question is: How will we as teachers help the learners with chronic dermatological condition to stay up to date with the laws concerning health care at school? What can we do to ensure that the laws are being followed?	
TP5: I will go onto the internet and download these laws and then I will put it on the notice boards of the school.	Education Laws: Share with teachers and learners
Researcher: Is there anyone that wants to add?	
Thanks a lot everybody, uhm, you really helped me today. So, I really appreciate it.	

APPENDIX P: COMPLETED QUESTIONNAIRE

Learner Participant 1	
Grade:10	
Gender: male	
Question 1. What kind of dermatological condition do you suffer from?	
Acne	Type of dermatological disorder: Acne
Question 2. Describe how your skin look during an onset of your dermatological condition.	
A lot of pimples.	Appearance of skin: Pimples
Question 3. How does the change of your skin make you feel?	
Sad. When I look in the mirror, I believe that I see the little me.	Emotions: Sad
Question 4.1. How does the dermatological condition affect your schoolwork?	
No, my condition doesn't affect my schoolwork at all.	Influence on learning: Schoolwork no effect

Question 4.2. How does the dermatological condition affect your school attendance?	
Not at all does my condition affect my attendance.	Influence on attendance: Present
Question 4.3. How does the dermatological condition affect your behaviour in class?	
Not all does my condition affect my behaviour in class.	Influence on class behaviour: No effect
Question 4.4. How does the dermatological condition affect your social interaction with your peers?	
I avoid my friends when condition becomes worse.	Influence on relationship with peers: Antisocial
Question 4.5. How does the dermatological condition affect your emotional health?	
Not all. I have built such a wall around me that no negative word anyone says will affect me .	Emotions: Protect
Question 5.1. Describe the treatment that you receive from teachers when you experience	

some of the consequences of the chronic dermatological condition for example fatigue/tiredness. (Positive)	
They are very understanding.	Support Teachers: Understanding
Question 5.2. Describe the treatment that you receive from teachers when you experience some of the consequences of the chronic dermatological condition for example fatigue/tiredness. (Negative)	
They can be strict sometimes.	Teachers: Strict
Question 6. Why is it important/or not important for your teachers to know about your chronic dermatological condition?	
No, it is not important for them to know.	Not necessary to Inform teachers: No need for collaboration with teachers.
Question 7.1. Describe the emotional support that you receive from your parents during flare-ups of your dermatological condition.	
They are really supportive and my supportline.	Support Parents: Emotionally supportive

Question 7.2. Describe the academical support that you receive from your parents during flare-ups of your dermatological condition.	
They supportive of this as well. They do not put such pressure on me.	Academically supportive
Question 7.3. Describe the spiritual support that you receive from your parents during flare-ups of your dermatological condition.	
My mother says that I am beautiful the way I am, and that I must not let anyone tell me otherwise.	Spiritually supportive
Question 7.4. Describe the medical support that you receive from your parents during flare-ups of your dermatological condition.	
They try to get me the best medical options.	Medically supportive
Question 8. Describe people's first reaction to your skin condition.	
Wow did you see that big pimple on your face?	
Question 9. How has the chronic dermatological condition that you are	

experiencing improved or deteriorated over the years?	
It is under control but not the way l would like to be.	
Question 10. Why would/or would you not describe your chronic dermatological condition as hereditary?	
No, l would not it describe like.	Hereditary: No
Question 11. What do you think will help you to cope better with your chronic dermatological condition?	
A serum that will work.	Serum
Question 12. What can your teachers do to help you to cope better with your chronic dermatological condition?	
They can make me more aware of the condition.	Awareness
Question 13. What can your parents do to help you to cope better with your chronic dermatological condition?	
Keep cheering my up when l am down.	Cheer up

Question 14. What can your siblings do to help you to cope better with your chronic dermatological condition?	
To help my parents to pay for the treatment because it is not cheap.	Siblings help financially
Question 15. What can your friends do to help you to cope better with your chronic dermatological condition?	
Just be there.	
Question 16. What advice can you give to other learners with a chronic dermatological condition?	
Stay positive	

APPENDIX Q: PROOF OF EDITING

Dissertation title:

Exploration of learner, parent, and educator experiences of chronic dermatological disorders as barrier to learning

Author:

Janine Gelderbloem

This letter confirms that I, Chané Swarts, edited the abovementioned thesis. Grammatical and spelling errors were corrected, and the flow improved by making structural changes where necessary. Where anything was unclear, I indicated it to the author using the comment function in *Microsoft Word*.

The *Track Changes* function was used to indicate all changes and it was the author's responsibility to accept or reject the changes and finalise the document.