

ENVIRONMENTAL FACTORS ENABLING OCCUPATIONAL WELL- BEING OF ADOLESCENTS LIVING IN GROENDAL COMMUNITY

by

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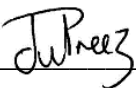


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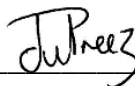


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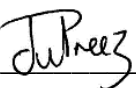


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I dedicate this work to Jesus Christ, my Lord and Saviour. You are El Roi – the God who SEES.

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DISSERTATION

Jani du Preez

*-Environmental factors enabling occupational well-being of adolescents living in
Groendal community-*

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LIST OF ACRONYMS

ICF-CY – International Classification of Functioning, Disability and Health, Children and Youth Version

OTPF – Occupational Therapy Practice Framework: Domain and Process

PEOP Model – Person-Environment-Occupational-Performance Model

SA – South Africa

CONCEPT CLARIFICATION

Adolescents:

According to the World Health Organisation, an adolescent is an individual between the ages of 10 and 19 years (World Health Organization, 2017, p. viii). For the purposes of this study the term adolescence will specifically refer to individuals between the ages of 13 years and 17 years, 11 months.

Child:

The term child refers to a person under the age of 18 years. This definition is in accordance with the South African Children's Act 38 (Republic of South Africa, 2006, p. 20). For the purposes of this study, the term 'child' includes adolescents between the ages of 13 years and 17 years, 11 months, who were the participants of this study.

Community-built practice:

Community-built practice refers to a strength-based approach to community development in occupational therapy, which sees community members as equal partners in the development and implementation of programs. Community members take responsibility for the programs and it requires cultural awareness and humility of the occupational therapist in order to succeed (Doll, 2010, p. 13). For the purposes of this study, community-built practice was used as a theoretical underpinning which informed decisions regarding the research journey.

Environmental factors:

External factors in a person's context, with a specific focus on physical and social factors (American Occupational Therapy Association, 2014, p. S8). For the purposes of this study the term environmental factors will be used to refer to physical and social environmental resources that are available to adolescents in the community of Groendal.

– Physical environment:

This term will be used to refer to environmental factors in people's lives that are man-made (World Health Organization, 2007, p. 191; American Occupational Therapy Association, 2014, p. S8). For the purposes of this study the term will be used to describe man-made resources in the community of

Groendal which may have an influence on the occupational well-being of adolescents, including products and resources used for personal consumption, personal use in daily living, communication, education, culture, recreation and sport, and the practice of religion or spirituality.

– **Social environment:**

This term will be used to refer to the relational support that people receive in their environment from a variety of people in the community (World Health Organization, 2007, p. 205; American Occupational Therapy Association, 2014, p. S8). For the purposes of this study the term will be used to describe the relational support that adolescents in Groendal have access to that could influence their occupational well-being; including immediate family, extended family, friends, acquaintances, peers, neighbours and community members, people in positions of authority, people in subordinate positions, strangers, domesticated animals, health professionals and other professionals.

Occupations:

Groupings of activities of daily life in which people engage; including leisure, work, play, self-care, rest and sleep, education and social participation. These activities take place within a specific environment, are influenced by the abilities and specific circumstances of individuals or communities and have purpose and give meaning (American Occupational Therapy Association, 2014, p. S6). For the purpose of this study, the term 'occupations' will specifically refer to activities that adolescents in Groendal participate in, by making use of the physical- and social resources in their community.

Occupational choice:

The choices individuals and communities are able to make regarding the occupations they participate in. These choices are influenced by the political-, social- and physical environment and involve a multi-lateral process between the persons' occupational engagements and the context in which they occur (Galvaan, 2015, p. 40). For the purposes of this study, occupational choice refers to the choices adolescents from the Groendal community were able to make regarding occupations they wanted to participate in within their specific contextual environment.

Occupational possibilities:

The types of occupations that are accessible and made available to a group of people within a certain socio-cultural context (Laliberte Rudman, 2010, p. 55). For the purposes of this study, occupational possibilities refer to the occupations that adolescents from the Groendal community have access to within their specific contextually situated environment. This concept is closely linked to occupational choice.

Occupational justice:

The ethical concern within occupational therapy regarding individuals' right to be able to freely participate in occupations that they experience as meaningful, within their specific socio-cultural context, without risk factors hindering them (American Occupational Therapy Association, 2014, p. S9; Durocher, 2017, p. 8). Thus, restrictions in possibilities to engage in occupations or the imposition of restricting occupations can be seen as a form of injustice (Durocher, 2017, p. 8). Occupational injustices occur in the form of various occupational risk factors including: occupational deprivation/- alienation/- imbalance/- marginalisation and - apartheid. For the purposes of this study the term 'occupational justice' will refer to the ethical consideration of the right of adolescents in Groendal to participate freely in occupations of their choice, without being held back by factors such as poverty, substance abuse, violence, school drop-out, gangsterism or other restrictions in the environment.

Occupational risk factors:

Factors that hinder optimal occupational participation for individuals or a community, leading to occupational injustice (Wilcock and Townsend, 2004, p. 75). For the purposes of this study occupational risk factors refer to factors in the Groendal community that hindered adolescents from actively engaging in occupations that were meaningful to them, for example, drug abuse, peer pressure, poverty, racial discrimination, lack of community resources, etc. The forms of occupational risk factors that are described in literature will be defined below.

– **Occupational alienation:**

Occupational alienation refers to the imposition of occupations, on an individual or community level, that are not considered meaningful (Wilcock and Townsend, 2004, p. 80; Durocher, 2017, p. 10). For the purposes of this study, occupational alienation refers to the imposition of occupations that were not considered meaningful in the lives of adolescents in the Groendal community.

– **Occupational apartheid:**

Occupational apartheid occurs when individuals or communities are denied access to certain occupations based on personal characteristics (Durocher, 2017, p. 10). For the purposes of this study, occupational apartheid refers to instances when adolescents in Groendal were denied access to certain meaningful occupations due to their socio-economic status or ethnicity.

– **Occupational deprivation:**

Occupational deprivation refers to factors outside of an individual's or community's control that hinder them from optimally engaging in occupations that are meaningful to them (Wilcock and Townsend, 2004, p. 81; Durocher, Gibson and Rappolt, 2014, p. 421). For the purposes of this study, occupational deprivation refers to the way in which factors like poverty, racial discrimination and limited resources could hinder adolescents in the Groendal community from engaging in occupations that they considered meaningful.

– **Occupational imbalance:**

Occupational imbalance refers to a lack of healthy balance between the different occupations that an individual or community can engage in (Wilcock and Townsend, 2004, p. 82; Durocher *et al.*, 2014, p. 422). For the purposes of this study, occupational imbalance refers to the lack of balance between different occupations that adolescents from Groendal could experience, due to limited resources and opportunities caused by poverty and racial discrimination.

– **Occupational marginalisation:**

Occupational marginalisation refers to the exclusion of certain individuals or communities from participation in certain occupations due to unseen discriminating norms and standards (Wilcock and Townsend, 2004, p. 81;

Durocher *et al.*, 2014, p. 422). For the purposes of this study, occupational marginalisation refers to the occupational exclusion that adolescents from Groendal could experience due to discrimination based on race, socio-economic status and other factors.

Occupational well-being:

A state of contentment as a result of the occupational needs of an individual or community being consistently met by having access to the necessary resources and opportunities for participation in occupations that are meaningful (Doble and Santha, 2008, p. 186). Occupational well-being is connected to the individual's subjective occupational experiences (Doble and Santha, 2008, p. 184) and refers to the satisfaction that people derive from their occupational lives (Doble and Santha, 2008, p. 186). For the purposes of this study, 'occupational well-being' will refer to the subjective state of contentment experienced amongst adolescents in Groendal, as a result of having their occupational needs met, through utilising the available physical and social environmental resources. For adolescents of Groendal, occupational well-being would present as contentment with the variety of occupations that were available to participate in, despite the challenges within the context.

Q methodology:

Q methodology is a mixed method study design that is used to systematically study *subjectivity*, in terms of opinions, beliefs, behaviours, or attitudes and it values the individual's experience as central in research, (Stenner, Watts and Worrell, 2007, p. 215). For the purposes of this study, Q methodology refers to the method that was used to gather data to answer the research question.

Q studies have five distinct stages that need to be followed according to literature. These stages are: **1) generating a Q set, 2) selecting a P-set, 3) Q sorting, 4) Q sort analysis and 5) factor interpretation** (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 401–402). The necessary terms within these stages are defined as follows:

– **Concourse (stage 1):**

A broad pool of items representing the topic at hand that can be gathered through a number of ways, including group- or individual interviews with people who are familiar with the topic, literature reviews or the researcher's own cultural experiences (Stenner *et al.*, 2007, p. 220; Naude, 2016, p. 402). For the purposes of this study, the concourse was gathered by a literature review and a semi-structured group interview with community members to gather a pool of physical- and social environmental factors in Groendal.

– **Q set (stage 1):**

A set of statements, words, pictures, photographs or other objects which represent different viewpoints on the studied topic (Watts and Stenner, 2012, pp. 56–57). For the purposes of this study the Q set consisted of 39 statements regarding environmental factors in the Groendal community, printed on cards.

– **P-set (stage 2):**

The participants of the Q study (Watts and Stenner, 2012, p. 71). For the purposes of this study, the P-set was comprised of adolescents living in the Groendal community.

– **Q sorting (stage 3):**

The data gathering method for a Q study, involving the participants sorting the cards from the Q set in rank, into a forced normal distribution curve called an answer sheet (Naude, 2016, p. 405). For the purposes of this study, Q sorting involved the adolescents who formed part of the P-set sorting the cards from the Q set onto an answer sheet to show which environmental factors in Groendal enabled their occupational well-being the most and which ones enabled their well-being the least.

– **Factor (stage 4):**

After Q sort analysis, factors are generated. A factor is representative of a number of Q sorts that have been sorted in a similar way, and hence represents a certain subjective viewpoint held by a group of participants. (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 409–411).

– **Factor array (stage 4):**

An answer sheet that shows exactly how the Q cards for a specific factor were placed on an answer sheet. (Stenner *et al.*, 2007, p. 226; Watts and Stenner, 2012, pp. 140–141). For the purposes of this study, two factor arrays were extracted and interpreted to gather the results of the study.

– **Eigenvalue (stage 5):**

The eigenvalue of the factors reflect the variance extracted from each factor and is calculated by multiplying the variance with the number of participants, and then dividing it by 100 (Coogan and Herrington, 2011, p. 26; Watts and Stenner, 2012, p. 105). For the purposes of this study, the eigenvalues of factors were used in the data interpretation phase to help identify the statistically significant factors.

SUMMARY

Key terms: Occupational well-being; environmental factors; adolescents; community.

Introduction: The occupational well-being of people is directly influenced by their physical- and social environments. Adolescents living in communities with limited resources are exposed to environmental factors that can cause occupational injustice due to limited occupational possibilities. However, within each community there are resources that can be utilised to enable occupational well-being, despite the effects of poverty. The community of Groendal, in the Western Cape of South Africa, is such a community whose adolescents' occupational well-being can be enabled through their environment, despite the occupational restrictions presented by limited resources.

Purpose: The main problem that motivated this study was that despite the known realities of occupational restrictions facing adolescents in the community of Groendal due to limited resources, no contextually situated information was found about environmental factors that the adolescents viewed as *enabling* to their occupational well-being. This is problematic in the light of the 'community-built practice' approach, which states that a strength-based approach is necessary when occupational therapists want to contribute to community development in a way that is authentic and inclusive and emphasise the importance of hearing the subjective voices of community members. In response to this problem, this study aimed to describe which physical- and social environmental factors adolescents living in Groendal viewed as enabling to their occupational well-being.

Methodology: Q methodology, a mixed methods study design, was chosen as the most suitable methodology for this study. Q methodology has a specific focus on studying the *subjective* viewpoints of participants. Thirty-three adolescents from the community of Groendal, aged 13 to 17 years, participated in this study. Participants of this study were provided with 39 cards of typed environmental factors from the Groendal community. The participants were asked to sort these cards onto a grid, indicating which environmental factors enabled their occupational well-being the most, and which ones enabled it the least. After sorting the cards, participants

answered open-ended questions to clarify why they sorted their cards in a specific manner. Hence, after data analysis, quantitative and qualitative data were extracted for interpretation.

Findings: The results from the quantitative and qualitative data were holistically interpreted which presented *four environmental enablers to occupational well-being according to adolescents from Groendal*. These four environmental enablers were: 1) Immediate families, 2) Educational resources, 3) Recreational resources and 4) Basic resources. The data from the open-ended questions provided a deeper understanding of *why* the participants viewed these four environmental factors as enablers to their occupational well-being. Immediate families were described as enablers to occupational well-being, because they: contributed to forming moral values, provided educational opportunities, met physical needs and provided social support. Educational resources were described as enablers to occupational well-being, because they provided opportunities for a better future, knowledge and emotional support. Recreational resources were described as enablers to occupational well-being, because they provided broader occupational choices and provided opportunities for a better future. Lastly, basic resources were described as enablers to occupational well-being, because they formed a baseline from which occupational well-being could be achieved.

Conclusions: The main value of this study was that it provided contextually situated information about adolescents' (living in Groendal) subjective views on which environmental factors enabled their occupational well-being. This information could be helpful, since it provides a point of departure for a community-built practice approach in the community of Groendal, with limited occupational therapy involvement to date. The information is strength-based, which aligns with the community-built practice approach.

Word count: 571

PREFACE

Philosophical stance and contextual background

*The child is not dead
the child lifts his fists against his mother
who shouts Africa!...*

*The child is not dead
Not at Langa nor at Nyanga
nor at Orlando nor at Sharpeville
nor at the police post at Philippi
where he lies with a bullet through his brain...*

*the child is present at all assemblies and law-giving
the child peers through the windows of houses
and into the hearts of mothers
this child who only wanted to play in the sun at Nyanga
is everywhere*

*the child grown to a man treks on through all Africa
the child grown to a giant
journeys over the whole world*

without a pass! (Jonker, 2007, p. 85)

On the 24th of May 1994, Nelson Mandela, the newly elected president of a democratic South Africa, read this poem by Ingrid Jonker in his State of the Nation address (Mandela, 1994). This poem resonates with my motivation for embarking on this research journey. It describes the same hope living in me: to see the children of our nation enabled to freely participate in occupations of their choice and to be protected from occupational injustice. Furthermore, reading the poem leads me to critically examine my contribution to enable occupational well-being and promote occupational justice for children and youth in my community. In this preface, the way in which my contextual background contributed towards the motivation for endeavouring this research journey will be disclaimed.

Firstly, my role as a **citizen** of the Republic of South Africa's impact on the inception of this study will be explored. Despite growing up in a post-apartheid era in South Africa, the realities of marginalisation of certain population groups in our country has, since a young age, troubled me. As a resident of a small and lavish tourist town in the Western Cape (Franschhoek), I am confronted daily with obvious spatial and

lifestyle divides between the majority of people in our community living with limited resources due to poverty, and the minority of wealthy individuals living in extreme luxury. It was from this place of discomfort with the present situations in our country and my own context that this study was born. Furthermore, an even deeper conviction of the potential and strengths within this community drove the process. Hence, a 'cultural humility' approach was followed throughout this study, encouraging health care workers within culturally diverse settings to be sufficiently humble to allow the clients to tell their own stories and learn from clients as they learn from us (Beagan, 2015, p. 277).

Secondly, as an **occupational therapist**, my occupational consciousness (Ramugondo, 2015, p. 488) was troubled by the ongoing occupational restrictions faced by groups of people within South Africa, even within a post-apartheid era. I was particularly concerned with promoting occupational justice for the adolescents living in the community of Groendal in Franschhoek. This group of individuals was exposed to a variety of occupational restrictions, including: poverty, substance abuse, gangsterism and school drop-out. These factors influenced the occupational choices available to adolescents in this community, potentially leading to occupational risk factors such as occupational deprivation, -marginalisation and -imbalance. However, even though these occupational restrictions are acknowledged, the occupational therapist's role in community settings also includes looking beyond the restrictions to occupational well-being and rather identifying the capacities and strengths within the community (Doll, 2010, p. 10). Therefore, this researcher was motivated to discover which environmental factors in Groendal *enabled* occupational well-being according to adolescents. Once again, from a 'cultural humility' point of view, this provided me with a deeper understanding of the subjective experiences of adolescents living in the Groendal community.

In this preface the contextual background to this study was explained. In retrospect, my understanding of the occupational experiences of adolescents living in my community was deepened. However, I was also humbled by the undiscovered depths in the daily occupational lives of the adolescents of Groendal. "The child" that Ingrid Jonker wrote about, is still present today, even as this dissertation was written. "The child" reminds us that there is still much that needs to be done to enable him to grow

into the giant that he can be. My hope is that I can continue gaining a deeper understanding of how to partner with adolescents in my community to enable occupational well-being and how to limit the detrimental effects of occupational injustices that limit their occupational choices.

CHAPTER 1

Introduction and Orientation

1.1. INTRODUCTION

Section 24(a) of the Constitution of South Africa states that “*everyone has the right to an environment that is not harmful to their health or well-being*” (Republic of South Africa, 1996, p. 9). Unfortunately, healthy environments were not the reality for many adolescents living in the community of Groendal, in Franschhoek, Western Cape, South Africa due to socio-economic restraints. Many of these adolescents’ environments were filled with a variety of challenges causing occupational restrictions, such as poverty, sick parents, gangsterism, teenage pregnancies and substance abuse (Erasmus and Kitching, 2012, p. 51; Ntoshe, 2017). Such occupational restrictions could lead to occupational injustice, since the adolescents in this community were often excluded from participation in a variety of occupations due to their circumstances.

However rather than focussing on the occupational restrictions present in the community of Groendal, this study aimed to discover some of the strengths within the community that could enable occupational well-being of adolescents. This decision was motivated from a community-built practice approach that emphasised the importance of strength-based research in community development (Doll, 2010, p. 10). Furthermore, the decision was motivated by a desire to practice ‘cultural humility’, (Beagan, 2015, p. 277). This was done through aiming to refrain from over-emphasising the occupational restrictions within Groendal from an outsider’s perspective, but rather focussing on discovering enablers to occupational well-being according to the adolescents.

Enabling occupational well-being of individuals and communities and structuring environments to improve occupational well-being lies at the heart of occupational therapy (Wilcock, 2005, p. 136; Doble and Santha, 2008, p. 184). Occupational well-being is experienced when people have the opportunity to freely engage in occupations of their choice and are able to structure their lives in such a way that their occupational needs are consistently met (Doble and Santha, 2008, p. 186). Several factors have been identified as influencers of occupational well-being of which the

environment is an important one. Furthermore, when studying the occupational well-being of people, discovering their *subjective* occupational experiences is pivotal, since each person will have a different view on what enables their occupational well-being (Doble and Santha, 2008, p. 187).

In this study, the environmental factors that enable occupational well-being of adolescents living in Groendal were investigated. The adolescents' own *subjective* viewpoints on environmental factors, enabling their occupational well-being, were described. This provided a contextually situated understanding of the way adolescents viewed their environment and provided a glimpse of their occupational experiences in their community.

The study contained four main concepts, namely: 1) communities with limited resources, 2) adolescents, 3) occupational well-being and 4) environmental factors. The interaction between these four concepts can be described by making use of the following analogy:



FIGURE 1: VISUAL PRESENTATION OF ANALOGY FOR STUDY

A farmer has a plantation of **young olive trees**. To help the young trees remain standing in the **harsh winds and storms** of this area, the farmer supports each tree by tying it to **wooden beams** planted in the soil next to it. Despite the harsh weather circumstances, these young trees can **grow and bear fruit**, due to the support they receive from the wooden beams in their environment (see figure 1 for illustration of analogy).

Just like the young trees in this analogy, the adolescents living in the Groendal community were exposed to challenging circumstances within their community. Like the wind and storms blowing on the trees, there were many personal and community related storms that the adolescents faced regularly, which increased vulnerability to occupational injustices. However, despite the storms, there were also supporting beams in place in this community that could help the adolescents to remain standing and bear fruit amid the challenges they faced. Like in the analogy, even though the contextual barriers faced by the adolescents from Groendal could not easily be overcome, the support received from the environment could be optimised to enable



FIGURE 2: FOUR MAIN CONCEPTS IN THIS STUDY

occupational well-being. Figure 2 visually depicts the four main concepts of this study as explained by the above-mentioned analogy.

1.2. PROBLEM STATEMENT

The problem statement for this study describes the problem that was identified which motivated this research. This problem was identified through clinical observations and literature study. The problem statement for this study will be discussed by firstly giving background relating to the four main concepts of this study as described in the previous section, namely, 1) communities with limited resources, 2) adolescents, 3) occupational well-being, and 4) environmental factors. Thereafter, the final problem statement will be articulated.



1.2.1. Communities with limited resources in the Western Cape and South Africa

The first major problem that was identified was the large number of South Africans living in communities where the majority of people have limited access to resources due to socio-economic and socio-cultural inequalities. One out of every two South Africans are classified as poor and reside in communities with limited occupational choices due to the effects of poverty (Statistics South Africa, 2017, p. 14). The specific community referred to in this research, was the Groendal community, in Franschhoek. The challenges the residents of this community faced included, limited resources, poor water and sanitation, informal housing, crime, gangsterism and drug abuse (Ntoshe, 2017).

Furthermore, from a cultural humility perspective, research in communities with limited resources often lack the contextually situated voice of community members (Beagan, 2015, p. 278). Caution needs to be taken not to approach communities facing socio-economic constraints from a position of cultural-, intellectual- or economical superiority, but rather from a position of cultural humility. This approach acknowledges the community members as equal and essential partners in the research process and highly values their subjective occupational experiences (Beagan, 2015, p. 278). Hence, the focus of this study was specifically to describe the adolescents from Groendal's *subjective* views on environmental factors enabling

occupational well-being and investigate their contextually situated occupational experiences.



1.2.2. Adolescents living in communities with limited occupational possibilities

Secondly, adolescents living in communities with limited occupational possibilities were identified as a particularly vulnerable group. Adolescents living in a community like Groendal were faced with specific challenges like school drop-out, teenage pregnancy, pressure to join gangs and start using substances (Erasmus and Kitching, 2012, p. 51; Kubik, Jennings and Olivier, 2014, p. 673; Ntoshe, 2017). In the South African context, many adolescents also experienced feelings of hopelessness and frustration due to a concept called “the poverty cycle” which left them feeling trapped in a life of poverty and limited opportunities (De Lannoy, Leibbrandt and Frame, 2015, p. 25). These realities can all contribute to occupational injustice, since they can cause occupational deprivation, -marginalisation and -imbalance among adolescents in these communities.

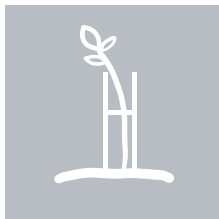
Furthermore, the problem was identified that there seemed to be a general trend in research regarding adolescents who were vulnerable due to lack of access to adequate resources, to focus solely on their challenges, rather than their strengths (Whetten, Ostermann, Whetten, Pence, O'Donnell, Messer, and Thielman, 2009, p. 1; Skovdal, 2012, p. 461). This problem in the light of the community-built practice approach in occupational therapy emphasised the importance of identifying strengths within a community as the point of departure for community development (Doll, 2010, p. 13). This study aimed to identify the physical- and social environmental factors in Groendal, that adolescents viewed as enabling to occupational well-being, rather than simply stating occupational restrictions in their environment (Whetten *et al.*, 2009, p. 1; Skovdal, 2012, p. 461).



1.2.3. Occupational injustices threatening occupational well-being of adolescents

From an occupational justice perspective, the problem was identified that the effects of socio-economic and socio-cultural inequalities limited the occupational choices that were available to adolescents in the Groendal

community. When the occupational choices of a community's adolescents are restricted due to limited resources and inequalities, the adolescents' formation of healthy occupational identities is stunted, causing confusion and hopelessness (Forsyth and Kielhofner, 2011, p. 58). In this process, occupational injustice occurs in the form of occupational deprivation (limited opportunities for occupational participation due to lack of resources), occupational marginalisation (exclusion from participation in certain occupations due to unseen socio-cultural and economic prejudice) and occupational imbalance (lack of balance between healthy occupations due to limited resources caused by poverty) (Durocher *et al.*, 2014, pp. 420–422). The adolescents living in the community of Groendal were at risk of experiencing these occupational risk factors, since their occupational choices were restricted due to limited resources and inequalities.



1.2.4. Limited evidence of effectivity of available environmental resources

Even though there were environmental resources available in the Groendal community, no evidence existed about which resources the adolescent perceived as enabling to their occupational well-being. Hence, it was possible that the programs and resources that were available in Groendal could be missing the needs of adolescents by assuming what would enable their occupational well-being on their behalf. The adolescents' subjective voices had not been heard to provide a deeper understanding and insight for community workers and policy makers regarding enablers to adolescent occupational well-being in Groendal. Furthermore, no occupational therapy research was found, describing which environmental factors enabled occupational well-being for adolescents living in communities with limited resources (the databases that were used to gather literature for this review included EBSCO, Africa Wide and Google Scholar). It appeared, therefore, to be a topic within occupational therapy that had scope for research and intervention strategies.

The final problem statement for this study was therefore: despite the known realities of occupational restrictions facing adolescents in the community of Groendal due to limited resources, no contextually situated information was found about environmental factors that the adolescents viewed as *enabling* to their occupational well-being. This was a problem in the light of the 'community-built practice' approach,

which states that a strength-based approach is necessary when occupational therapists want to contribute to community development in a way that is authentic and inclusive (Doll, 2010, p. 13). Furthermore, it was also problematic since the adolescents from Groendal's subjective occupational experiences had not been voiced yet, which inhibited culturally and contextually relevant occupational therapy practice.

The aim and objectives that were identified based on the problem statement, will be stated in the following section.

1.3. RESEARCH AIM AND OBJECTIVES

The research question for this study was: *which physical- and social environmental factors do adolescents in Groendal, view as enabling to their occupational well-being?*

The following aim and objectives were formulated to answer the research question.

1.3.1. Aim

The aim of this study was to describe which physical- and social environmental factors adolescents living in Groendal, viewed as enabling to their occupational well-being.

1.3.2. Objectives

1. To identify physical environmental factors that were available to adolescents in Groendal
2. To identify social environmental factors that were available to adolescents in Groendal
3. To describe adolescents in Groendal's subjective viewpoints on which environmental factors enabled their occupational well-being

1.4. METHODOLOGY

To answer the research question and to meet the aim and objectives of this study, several methodological options were explored. A specific mixed methodology called **Q methodology** was found to be the most suitable for this study. This study design was chosen since it provided a way to determine the subjective viewpoints of adolescents in Groendal in a manner that was comprehensive and provided concrete

quantitative findings, but still left space for individual interpretation. A brief overview will be given on why this choice was made with further detail about the methodology presented in Chapter 3.

Q methodology is a method that is used to systematically study *subjectivity*, in terms of opinions, beliefs, behaviours, or attitudes and it values the individual's experience as central in research (Stenner *et al.*, 2007, p. 215). Q methodology combines qualitative and quantitative study approaches and is therefore classified as a mixed method study design (Brown, 1996, p. 562). The quantitative aspect of Q methodology involves using factor analytical techniques that provide numerical data. The qualitative component of Q methodology focusses on describing how and why people think in certain subjective ways (Brown, 2004, p. 1; Naude, 2016, p. 399).

A Q study has five distinct stages that need to be followed to make the study an authentic Q study. These stages are: **1) generating a Q set, 2) selecting a P-set, 3) Q sorting, 4) Q sort analysis and 5) factor interpretation** (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 401–402). These stages (as applied to this study) will be described briefly in this chapter (see figure 3), but more detail will be provided in Chapter 3.

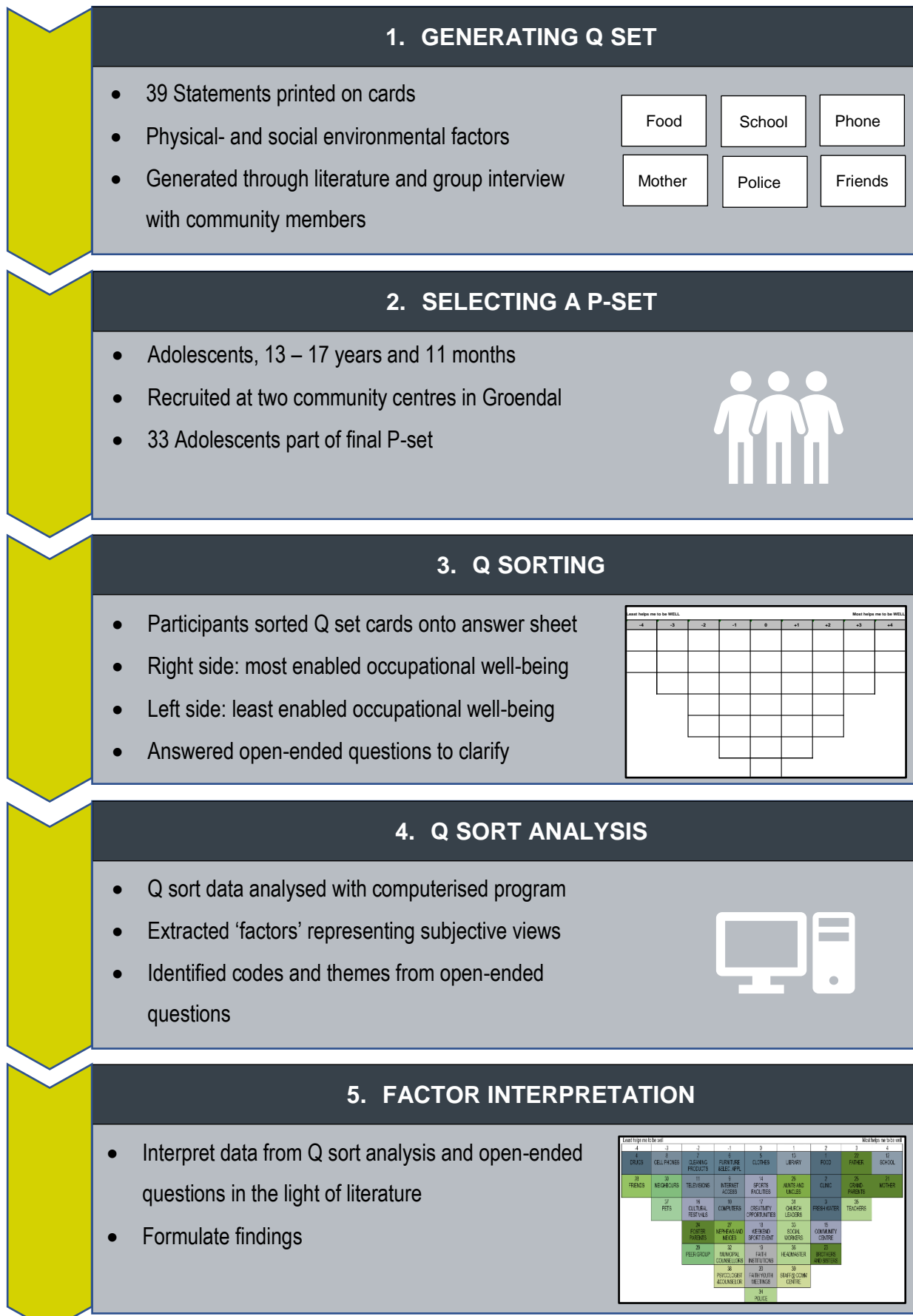


FIGURE 3: FIVE STAGES OF THIS Q STUDY

Stage 1: Generating Q set. The term Q set refers to a set of statements, words, pictures, photographs or other objects which represent different viewpoints on the studied topic (Watts and Stenner, 2012, pp. 56–57). In this study, 39 statements were generated, all representing physical- and social environmental factors in the Groendal community. The Q set was generated by firstly referring to literature regarding classifications of environmental factors and then refining the statements through a semi-structured group interview with members of the Groendal community. These 39 statements were printed on cards. This pack of 39 cards was the final Q set.

Stage 2: Select a P-set. In Q methodology the term P-set refers to the participants of the study (Watts and Stenner, 2012, p. 71). The participants of this study were recruited from the two community centres in the Groendal community. Adolescents between the ages of 13 and 17 years and 11 months were approached to participate in the study. Thirty-three adolescents brought back consent and assent forms and formed part of the final P-set for this study.

Stage 3: Q sorting. This data gathering technique involved the participants sorting the Q set onto a forced normal distribution curve called an answer sheet (see figure 3 number 3) (Naude, 2016, p. 405). The 33 participants each received an opportunity to read through all 39 statements of the Q set and to sort the statements onto the answer sheet in terms of which environmental factors in Groendal “most help them to be well” and which ones “least help them to be well”. After the Q sorting process, each participant was asked open-ended questions, which generated qualitative data to give depth to the quantitative findings from the Q sorting.

Stage 4: Q sort analysis. Firstly, the data from the Q sorts were analysed with the help of a computerised program. The program identified Q sorts that, based on their correlations, appeared to match as a group or type. These groups are referred to as “factors” in Q methodology (Naude, 2016, p. 409). Thereafter, the data from the open-ended questions were coded and themes were identified.

Stage 5: Factor interpretations. In this stage, the data from the Q sorts and open-ended questions were interpreted based on literature to gain an understanding of the subjective viewpoints of participants regarding environmental factors that enabled occupational well-being in Groendal.

Throughout these five stages of the study, specific ethical considerations were made to ensure that the study was ethically sound. In the following section, a summary will be provided on the ethical considerations for this study.

1.5. ETHICAL CONSIDERATIONS

The research proposal was approved by the “Health Sciences Research Ethics Committee of the UFS” (Ethics number: HSREC 89/2017 (UFS-HSD2017/0894)). Informed consent for conducting the study was obtained from the managers of the two community centres, participants of the semi-structured group interview and the parents of the participating adolescents. The adolescents who participated in the study also gave informed assent. All information in the study was treated as confidential and participants of the study remained anonymous. Participants were free to withdraw from the study at any time. All participants were informed of the researcher’s intention to publicise the results of the study. The detailed discussion of the ethical considerations of this study can also be found in Chapter 3.

1.6. CHAPTER LAY-OUT

Each chapter in this dissertation focusses on a certain phase of the research process. A short summary of each chapter is given in this section.

Chapter 1, *Introduction and Orientation*, gives an overall background to the study and orientates the readers on the study and the outline of the dissertation. The subtitles in this chapter are: problem statement, aim and objectives, methodology, ethical considerations and chapter lay-out.

In **Chapter 2**, *Literature Review*, relevant literature is discussed to motivate why this specific research topic was chosen. The chapter discusses literature regarding the four main concepts of this study, namely: 1) communities with limited resources, 2) adolescents, 3) occupational well-being and 4) the environment.

Chapter 3, *Research Methodology*, describes the scientific procedures that were followed to answer the research question. The chapter describes Q methodology, a mixed methods methodology, as the chosen method of inquiry for this study. The data gathering procedures are described by using the recommended outline for Q studies.

Data management and trustworthiness principles are also discussed. Lastly this chapter stipulates the ethical considerations that were made throughout the research process.

In **Chapter 4**, *Results*, the results gathered from this study is presented. The chapter starts by describing the participants of the study. Thereafter, the data is presented by firstly describing the quantitative data from the Q sorts and then describing the qualitative data from the open-ended questions. In this chapter the data is merely described and not discussed.

Chapter 5 is a *Discussion* of the results that were described in Chapter 4. Hence, this chapter provides an answer to the research question by discussing the four environmental factors that were identified by participants as enablers to occupational well-being in Groendal. These four environmental factors were: 1) Immediate families, 2) Educational resources, 3) Recreational resources and 4) Basic Resources.

Chapter 6 is the final chapter of this dissertation and contains the *Conclusion*. In this chapter, the objectives of this study are revisited and how they were met is described. Recommendations for practice and further research are also discussed. Finally, the limitations and value of the study are described.

1.7. CONCLUSION

In Chapter 1 an introduction to this study was given. The researcher's concern with the occupational well-being of adolescents in the community of Groendal was described. Furthermore, the problem statement, the aim and objectives, methodology, ethical considerations and the value of this study were discussed briefly. An overview of each chapter was also provided.

In the following chapter, Chapter 2, a literature review will be done to clearly emphasise the importance of this study in the light of relevant literature. Literature regarding the four main concepts of this study will be reviewed, namely: 1) communities with limited resources in South Africa and the Western Cape, 2) adolescents, 3) occupational well-being and 4) environmental factors.

CHAPTER 2

Literature Review

2.1. INTRODUCTION

Chapter 1 consisted of an overview and introduction to this study. The aim of the study was stated, namely: describing which physical- and social environmental factors adolescents living in Groendal viewed as enabling to their occupational well-being. Furthermore, the problem statement, methodology, ethical considerations and value of the study were briefly described. In Chapter 2, literature regarding the main concepts of this study will be reviewed, to gain a better understanding of the topic that will be studied through this research.

In Chapter 1, an analogy was used to explain the different components of this study (cf. 1.1). In this literature review relevant literature regarding the four main concepts represented in the analogy, will be discussed, namely: 1) the storm and wind, representing the occupational restrictions caused by poverty and other challenges in the community of Groendal, 2) the young trees, representing adolescents living in Groendal, 3) the growth and fruit bearing of the trees, referring to the adolescents' potential to experience occupational well-being and 4) the support beams, representing environmental factors that could enable occupational well-being. These four different components of this study will be expanded upon by reviewing the available literature, in this chapter. The layout for the literature review is depicted in figure 4. The databases that were used to gather literature for this review included EBSCO (including CINAHL, a trustworthy allied-health database), Africa Wide and Google Scholar.



FIGURE 4: LITERATURE REVIEW OUTLINE

2.2. COMMUNITIES WITH LIMITED RESOURCES: UNDERSTANDING THE CONTEXT



The first component of the study that will be described in this literature review, is communities in South Africa and the Western Cape that have access to limited resources due to poverty. When referring to the analogy explaining this study, this section will describe the climate in which the young trees are growing. This will be described to motivate why research regarding enabling occupational well-being is necessary in communities with limited resources.

The communities in South Africa and particularly in the Western Cape that experience socio-economic constraints are faced with several challenges that cause occupational restrictions. Some of these challenges include significant violence and substance abuse statistics, poor water supplies and inadequate housing (Statistics South Africa, 2016a, p. 56). However, these communities also possess numerous strengths (though they are sometimes overlooked). These strengths include rich and meaningful cultural heritages and an appreciation for the value of engaging in collective occupations (Ramugondo and Kronenberg, 2015, p. 4). In this section the statistics about communities faced with socio-economic constraints in South Africa will be examined, to understand the occupational injustices that occur due to limited resources in a community. Thereafter, the role of occupational therapy in community-built practice will be explored to illustrate ways in which occupational well-being can be enabled despite challenging contextual factors.

2.2.1. Statistics painting the picture

Statistics are a helpful tool to better understand the context of people living in communities with limited resources due to poverty in South Africa. In this section, relevant statistics will be reviewed to get a picture of the contextual realities of adolescents living in communities with limited resources in South Africa, the Western Cape, and more specifically, the Groendal area.

2.2.1.1. Statistics regarding poverty in South Africa and the Western Cape

South Africa's statistics on people living in poverty is quite alarming. When using the upper-bound poverty line (R992 per person per month), one out of every two South Africans live in poverty (Statistics South Africa, 2017, p. 14). Per population group the following percentages of each population are classified as impoverished: 64.2% Black Africans, 41.3% Coloured, 5.9% Indian and 1% White (Statistics South Africa, 2017, p. 57). Unfortunately, there are large numbers of children (aged 0-17) in South Africa who live in poverty-stricken households with food insecurity and hunger (Bhardwaj, Sambu and Jamieson, 2017, p. 29). When comparing age groups, poverty levels among South Africa's children are the *highest*, with 66.8% of South African children being classified as poor (Statistics South Africa, 2017, p. 64). The Western Cape is the province in South Africa with the second lowest poverty rate in South

Africa, but this does not mean that poverty is not a problem in this province. Thirty-four percent of children in this province are classified as poor when using the upper-bound poverty line (Statistics South Africa, 2017, p. 65).

Poverty has a significant effect on occupational participation and -well-being. People living in socio-economically constrained contexts often have fewer occupational possibilities and choices due to limited resources and marginalisation based on socio-cultural and -economic structures (Hamilton, 2010, p. 273; Laliberte Rudman, 2010, p. 58; Galvaan, 2015, p. 39, 2017, p. 52). In light of the above-mentioned statistics, the occupational well-being of 50% of South Africans is at risk due to poverty. This reality emphasises the importance of research describing ways to enable occupational well-being of people in communities with limited access to resources.

2.2.1.2. Statistics regarding family structures

Many South African children do not consistently live with their biological parents, an interesting phenomenon that is quite common in South Africa (Hall and Sambu, 2017, p. 101). The number of children in South Africa who live with both of their parents are 31%. Thirty-five percent of South African children live with their mothers only, and 4% with their fathers only. Twenty-nine percent do not live with either of their parents (Hall and Sambu, 2017, p. 101). In the poorest 20% of South Africa's children, this phenomenon is even more prevalent, with only 17% of children from this group living with both parents. In contrast to this, 75% of the children from the wealthiest 20% of households in South Africa, live with both their parents (Hall and Sambu, 2017, p. 101). In the Western Cape, the distribution of children living with their biological parents are as follows: 54.2% live with both parents, 35.6% live with mother only, 2.5% live with father only and 7.7% live with neither parent (Hall and Sambu, 2017, p. 101). See figure 5 for visual representation of this data.

The occupational well-being of people is not merely determined by 'doing' occupations, but is largely influenced by a sense of 'belonging' (Hammell, 2015a, pp. 45, 46). Inconsistent family structures and moving from one family member to another could have a negative effect on an adolescent's sense of belonging. This is particularly true for adolescents whose environments are also influenced by the

uncertainties caused by poverty and marginalisation (Peers and Fleer, 2014, p. 914; Hammell, 2015a, p. 42).

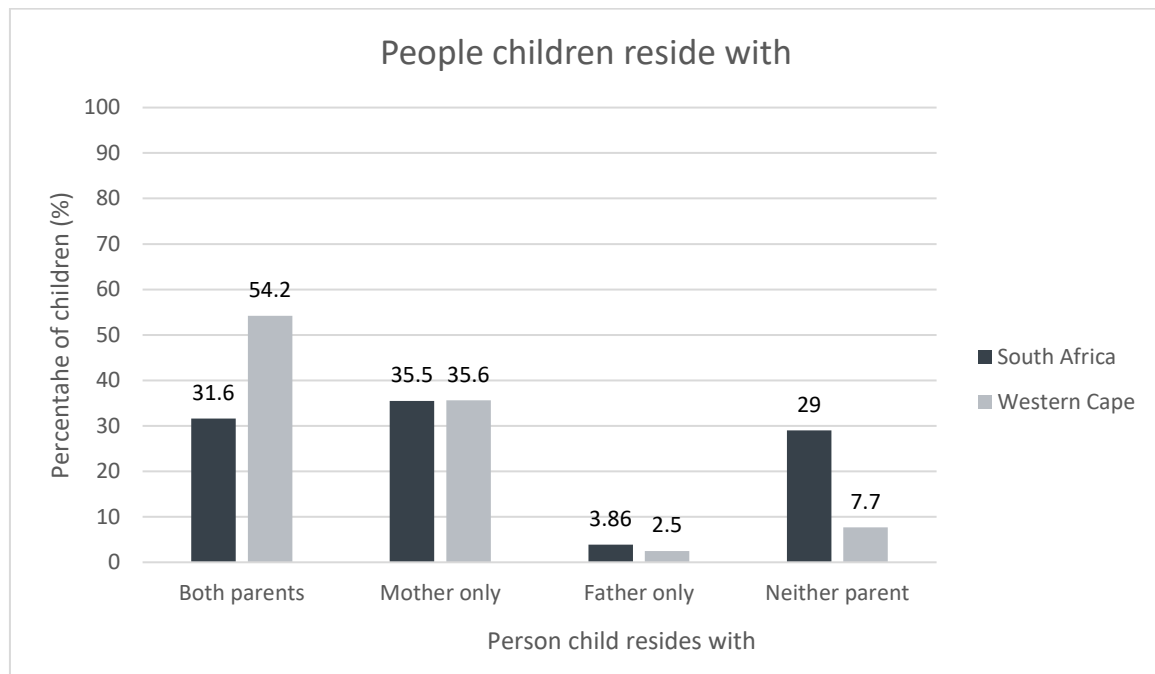


FIGURE 5: PEOPLE CHILDREN IN SOUTH AFRICA RESIDE WITH (HALL AND SAMBU, 2017, P. 101)

2.2.1.3. Statistics regarding education

All South African children have the right to basic education. However, the quality of education in South Africa is concerning (Bhardwaj *et al.*, 2017, p. 29). In 2015, 69% of 16-17 year old children passed Grade 9 in South Africa and 76% in the Western Cape (Hall, 2017, p. 124). Less than half of the children in South Africa who started school successfully completed matric (Hall, 2017, p. 124). According to Statistics South Africa's general household survey of 2016, the most prevalent reasons that children between 7 and 18 gave for not attending school were: no money for fees, poor academic performance (mainly males) and family commitments (mainly females) (Statistics South Africa, 2016b, p. 12). Furthermore, there was a strong correlation between the education of individuals and their poverty levels (Statistics South Africa, 2017, p. 61). In 2015, 79% of South African children with no form of education was classified as poor. This percentage decreased with an increase in education levels with only 8% of children with higher education being impoverished (Statistics South Africa, 2017, p. 62). See visual representation of data in figure 6.

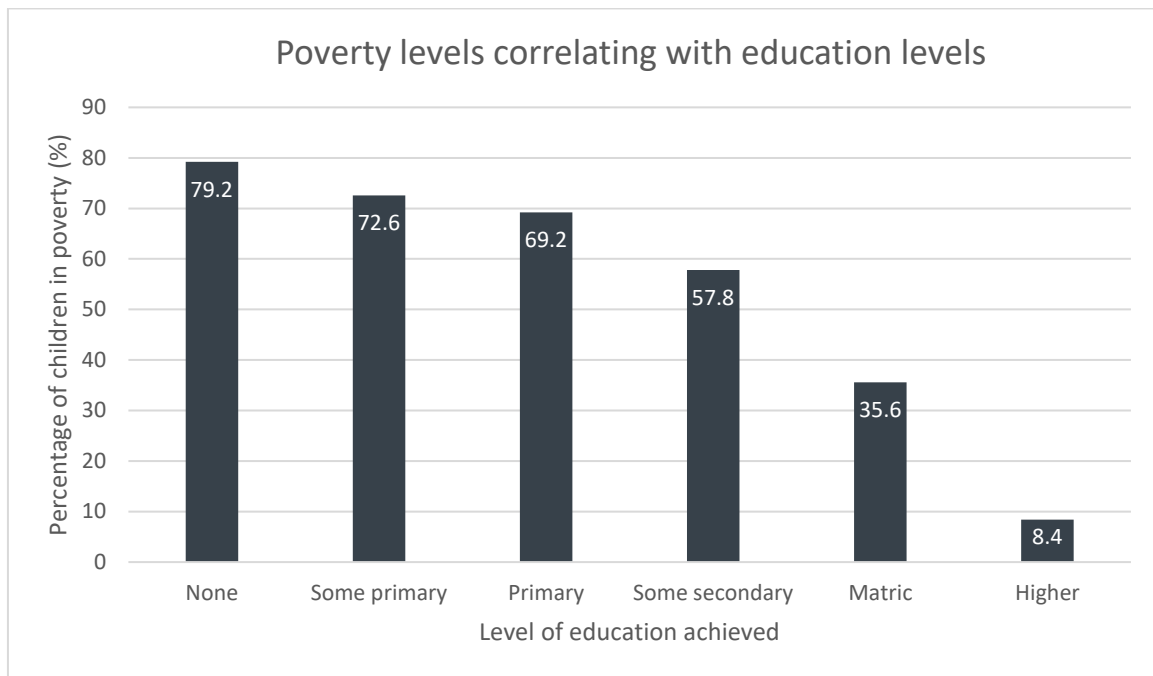


FIGURE 6: POVERTY LEVELS CORRELATING WITH EDUCATION LEVELS (STATISTICS SOUTH AFRICA, 2017, P. 62)

Poor quality of and access to education have serious effects on the occupational well-being of adolescents in South Africa. Participation in education related occupations is a basic occupational (and human) right, and without it, occupational injustice occurs. Educational occupations satisfy a deeper need than merely 'doing', they create an opportunity for 'becoming', which provide purpose and hope (Wilcock, 2006, p. 148).

2.2.1.4. Statistics regarding adolescent risk behaviour

Adolescence is a life phase that often accompanies participation in risk behaviours causing occupational restrictions (Gouws, Kruger and Burger, 2008b, p. 239; Kubik *et al.*, 2014, p. 673). The Western Cape has higher school drop-out rates than the rest of the country, especially for 12 to 15 year old learners (Western Cape Government, 2013, p. 21). Additionally, the Western Cape has one of the highest rates of Foetal Alcohol Syndrome in the world, due to the high overall alcohol intake in the Western Cape (Western Cape Government, 2013, p. 24). In 2016, 5.1% of females aged 14 to 19 were pregnant (Statistics South Africa, 2016b, p. 26). Drug abuse is also common among the youth in the Western Cape (Western Cape Government, 2013, p. 24).

Risk behaviour in adolescents living in communities with limited resources can form barriers to occupational well-being. Alcohol abuse, for example, can prevent adolescents from participating in occupations that are pleasurable in ways that support well-being, are restorative and productive, which can lead to occupational deprivation (Pierce, 2003, p. 38). Furthermore, the adolescents' co-occupations can be impacted by participation in these occupations in numerous ways, which could also be a barrier to occupational well-being. In essence, when studying the occupational well-being of adolescents in communities with socio-economic constraints, the effects of occupational restrictions such as risk-behaviour, should be taken into consideration.

2.2.1.5. Statistics regarding the Groendal community

The specific community where this study was conducted is called Groendal, which is situated just outside of Franschhoek in the Western Cape. Groendal falls under the Stellenbosch municipality as part of Ward Two. Seventy-eight percent of the people (older than 20) living in Ward Two do not have matric, 19.5% have matriculated and 2.2% have received higher education. Only 19.4% of the population in Ward Two live in brick or concrete residential structures, with 73.5% living in informal dwellings. Forty percent of the population in this ward receive a monthly income of only R1600 or less (Stellenbosch Municipality, 2018). Adolescents in this community face many challenges including drug abuse, especially cannabis and 'tik' (crystal methamphetamine), teenage pregnancies, broken family structures and violence (Ntoshe, 2017). These statistics mirror those of the broader South Africa, however, the Groendal community is unique as the socio-economic divide is more extreme than in most towns of South Africa. This is due to the Franschhoek community's significant number of foreigners and millionaires, since it is mainly an investment hub and tourist town.

Despite the negative statistics regarding Groendal, there are several possible enablers to occupational well-being in Groendal. These resources include, amongst others, a well-equipped community sports centre, a community centre that provides support to the community members (all ages), two practicing social workers, a governmental clinic, a newly built public library, soup kitchens, an outdoor gym and projects to prepare youth for the open labour market (Ntoshe, 2017). These resources

have the potential to enable occupational well-being if they are utilised by adolescents in the community. They could provide adolescents with opportunities for doing, being, becoming and belonging (Wilcock, 2006, p. 148; Hammell, 2015a, p. 42) and provide opportunities for occupational engagement that is productive, pleasurable and restorative (Pierce, 2003, p. 38).

Even though the statistics regarding communities in South Africa and the Western Cape raise concern, occupational therapists (like many other professionals) have much to contribute to the well-being of communities and individuals whose lives are affected by limited access to resources. In the next section, the role that occupational therapists can play in communities like Groendal will be discussed briefly.

2.2.2. Community-based occupational therapy

Occupational therapy has an important role to play in advancing occupational justice and social inclusion in communities like Groendal that have limited access to resources due to socio-economic constraints (Galvaan and Peters, 2017, p. 172). According to the World Federation of Occupational Therapists:

*Occupational therapists can work with all people, including those who have an impairment of body structure or function owing to a health condition, or who are restricted in their participation or who are **socially excluded owing to their membership of social or cultural minority groups*** (World Federation of Occupational Therapists, 2012) (emphasis added).

The community members of Groendal can be seen as a socially excluded group of people due to socio-cultural and socio-economical marginalisation, and thus fit the previous description of populations who can benefit from occupational therapy. Furthermore, the OTPF stipulates that occupational therapists may work with individuals, groups or populations. In this case populations refer to people living in the same environment or sharing interests (American Occupational Therapy Association, 2014, p. S3), like the residents of the Groendal community. In community practice in occupational therapy, the focus moves away from the traditional medical model and health is rather seen as the opportunity to engage in meaningful occupation without environmental, physical, social or mental inhibitors (i.e. occupational well-being) (Doll, 2010, p. 3).

Two forms of community practice in occupational therapy are described by Doll, namely: 'community-based practice' and 'community-built practice' (Doll, 2010, p. 12). '**Community-based practice**' refers to the location where the occupational therapy services are provided and specifically requires practitioners to adapt a health promotional approach. It includes programs like adult day-care programs and driving rehabilitation programs (Doll, 2010, p. 12). Hence, community-based practice involves implementing programs in a community that the therapist deems necessary to serve the particular community. '**Community-built practice**' refers to a strength-based approach, which views community members as equal partners in the development and implementation of programs. Community members take responsibility for the programs and therefore require cultural awareness and humility of the occupational therapist in order to succeed (Doll, 2010, p. 13). This study was based on the community-built practice approach, since it sought to find the strengths within the environment that enabled occupational well-being for adolescents. Furthermore, the adolescents' subjective viewpoints on enablers to occupational well-being were explored in order to hear their voices and partner with them in the process of further development. Community-built practice is founded on four main principles, namely: 1) each community has strengths, 2) community members are equal partners in community development, 3) community members take ownership of projects and 4) it requires cultural awareness from therapists (Doll, 2010, pp. 13, 14). This approach highly emphasises collaboration and partnership with community members (Doll, 2010, p. 14).

Increasingly, there has been a focus on how occupational therapy in community settings can contribute to community development, social inclusion and social justice (Galvaan and Peters, 2017, p. 173). The 'Occupation-based Community Development framework' (ObCD), developed by Galvaan and Peters, suggests that occupations can be utilised to promote community development, and through this improve occupational justice and social inclusion in communities (Galvaan and Peters, 2017, p. 172). The framework specifically focuses on facilitating change within marginalised communities by investigating how occupational participation is experienced within these contexts (Galvaan and Peters, 2017, pp. 173, 174). The framework proposes four interactive phases for implementing campaigns in communities. These phases are: Initiating-, Designing-, Implementing- and

Monitoring a campaign (Galvaan and Peters, 2017, p. 174). This current study aligns with the first phase of the ObCD, *initiating a campaign*, as one of the key aspects of this phase is to “use occupational constructs to analyse and understand influences on participation” (Galvaan and Peters, 2017, p. 175). This study was designed to provide a better understanding of adolescents in Groendal’s subjective viewpoints of enablers to occupational well-being, rather than making assumptions on the adolescents’ behalf. This could possibly be seen as part of the initiating phase that could inform the designing and implementation phases of future campaigns.

In this section, the realities of communities faced with socio-economic challenges in South Africa and the Western Cape were discussed as well as the role occupational therapy could play in marginalised communities. Furthermore, the aim was to highlight why research in communities with limited resources in the Western Cape was important in order to limit occupational injustice. In the following section, a closer look will be taken at adolescents specifically. This will be done to explain why this specific group was chosen as the population group for this study.

2.3. ADOLESCENCE: AN IMPORTANT PHASE FOR OCCUPATIONAL INTERVENTION



The second aspect of this study that will be described in the literature review focusses on adolescents living in communities with limited resources due to socio-economic constraints. When referring to the analogy explaining this study, this section will describe the characteristics of the young olive trees. Firstly, a description of adolescence as a life stage will be given, then the impact of environmental factors on adolescents will be described. Lastly, governmental strategies for supporting adolescents on an international, national and provincial level will be described.

The South African Constitution, section 28(2), states that children’s best interests are of paramount importance (Republic of South Africa, 1996, p. 12). Section 28(1) of the constitution further states that every child has the right to “(d) *be protected from maltreatment, neglect, abuse or degradation*” (Republic of South Africa, 1996, p. 11). The term “child” in the South African Child Care Act refers to individuals who are younger than 18 years, and thus includes the participants of this study who were

adolescents. This section emphasises the importance of advocating for occupational justice and -well-being of adolescents in communities with limited access to resources.

2.3.1. Description of adolescence as a life stage

Adolescence can be described as the developmental phase between childhood and adulthood which is marked by a number of significant changes in a person's cognitive, behavioural, physical and social functioning (Gouws, Kruger and Burger, 2008a, p. 2; Louw and Louw, 2014, p. 322). Personality development in the adolescent phase is described by Erik Erikson as **identity versus identity confusion** (Stephanie, 2005, p. 12; Louw, Louw and Kail, 2014, p. 20). According to Erikson, the successful completion of this phase will lead to establishing an identity and this will minimise confusion (Louw and Louw, 2014, p. 360). Even though Erikson's work was developed in a Eurocentric context, the forming of identity in adolescent years remains important in adolescents from the Global South. Adolescents living in communities with socio-economic constraints in South Africa often do not have access to resources which could aid the forming of a positive identity due to limited opportunities and relational support (Burns, Jobson and Zuma, 2015, p. 83). Continuous occupational marginalisation can also interfere with the formation of a healthy identity in adolescents living in communities with socio-economic constraints, which can lead to confusion.

Certain aspects that are important in the forming of the adolescent's identity include, gender roles, relationships, religion, marriage, politics, values, independence from parents, social responsibilities and work roles (Stephanie, 2005, p. 12; Louw and Louw, 2014, p. 361). Physical development in the adolescent phase is marked by rapid and significant changes among males and females in terms of gender characteristics, hormonal changes and cognitive development (Meyer, 2005, p. 152; Louw and Louw, 2014, p. 327; World Health Organization, 2017, pp. xii, 6). In addition to this, adolescence is also a period that can be marked by risk behaviour and experimentation with occupations that restrict well-being. Sexually transmitted infections, teenage pregnancies and abortions, alcohol and substance abuse, and juvenile delinquency are all possible issues that adolescents are confronted with in

South Africa (Gouws *et al.*, 2008b, p. 239; Kubik *et al.*, 2014, p. 673). These issues can have a significant effect on the identities of adolescents and can cause confusion.

Furthermore, the social development of adolescents also play a major role in the formation of their identities (Burns *et al.*, 2015, p. 84; Berry and Malek, 2017, p. 51; World Health Organization, 2017, p. 7). It has been found that individuals from stable and healthy family environments are prone to have better academic achievements, higher levels of self-concept and problem solving skills, and lower prevalence of emotional and behavioural problems as well as stress levels (Kubik *et al.*, 2014, p. 672; Burns *et al.*, 2015, p. 84; Berry and Malek, 2017, p. 51). It seems that healthy family environments have the potential of establishing healthy identities in adolescents through providing a sense of belonging, and through this, possibly limiting participation in occupational restrictions (Galvaan, 2017, p. 53).

When considering the above-mentioned points, the importance of the environment's role in the occupational well-being of adolescents becomes evident. Environments can provide or inhibit occupational possibilities, and this influences occupational justice. This topic will be further discussed in the following section.

2.3.2. Environmental influences on adolescents

For the purposes of this specific study, the effects of the environment on adolescents is an important topic to review, since this study focussed on how adolescents in Groendal experienced the environmental factors available in the specific context.

The effect of the environment on children is expressed eloquently by David Howe and also holds true for adolescents:

Whatever cards heredity deals, at birth each child has the potential to become a unique, life-affirming individual. But how a particular genetic hand gets played, how the genes express themselves, depends so much on the quality and character of the environment as it presents itself, day by day, week by week, year by year. Environments that are rich and responsive are most likely to help children realise their full potential. However, when the world is harsh and dangerous, cold and rejecting,

bleak and empty, development suffers. Progress is impaired. Lives are disfigured (Howe, 2010, p. 9).

The important role that environments play in the development and well-being of adolescents is strongly confirmed by occupational therapy literature (Townsend, Stone, Angelucci, Howey, Johnston and Lawlor, 2009, p. 50; Turpin and Iwama, 2011, pp. 89–90; American Occupational Therapy Association, 2014, pp. S4, S9; Galvaan, 2017, pp. 49, 53). All adolescents have been exposed to a variety of physical- and social environmental factors from conception, and these all play an integral role in the occupational possibilities that are available to them, in turn influencing occupational well-being and -identity (Mmari, Blum, Sonenstein, Marshall, Brahmhatt, Venables, Delany-Moretlwe and Lou, 2014, p. 131; Berry and Malek, 2017, p. 51; Galvaan, 2017, p. 49).

Physical environmental factors are identified as an important influencer to occupational well-being in occupational therapy (Turpin and Iwama, 2011, pp. 89–99; Galvaan, 2017, p. 51). Examples of physical environmental factors that can have a detrimental effect on the occupational well-being of adolescents include: poverty, poor health and sanitation, malnutrition and lack of stimulation (Kubik *et al.*, 2014, p. 673; Mmari *et al.*, 2014, p. 131). Adolescents who have been raised in communities with high levels of exposure to violence and substance abuse since a young age, have been found to be more likely to become involved in similar activities (Harrison, 2010, p. 112). Furthermore, adolescents who grow up in environments influenced by poverty, with poor housing and limited resources, have also been found to have higher incidences of depression and suicidal attempts, poor physical- and mental health and poor academic achievements (Harrison, 2010, p. 112; p. 433; World Health Organization, 2017, p. xvi).

Social environmental factors also play a major role in the occupational well-being of adolescents (Turpin and Iwama, 2011, pp. 89–99; Galvaan, 2017, p. 52). Social environmental factors that specifically influence the occupational well-being of adolescents, include social contact (or lack of contact) with immediate family, extended family, community members, friends, teacher etc. (World Health Organization, 2007, pp. 205, 206; Berry and Malek, 2017, p. 52). If adolescents have

experienced rejection or abandonment in these critical relationships from a young age, it significantly affects their development of self-concept, sense of security and ability to form other healthy relationships in later developmental stages (Louw and Louw, 2014, p. 408). Unstable and chaotic home environments with adults who suffer from substance abuse or mental illnesses, can have extremely detrimental effects on adolescents, resulting in conduct disorders and other problems (Harrison, 2010, p. 111). Adolescents who have been exposed to these kinds of home environments, often lack the necessary parenting skills themselves when reaching parenthood, forming a cycle of poor home environments (Harrison, 2010, p. 111). In the community of Groendal, many adolescents are exposed to these kinds of detrimental environments and are in need of support in order to break potentially harmful cycles (Erasmus and Kitching, 2012, p. 51; Kulsen, 2017; Ntoshe, 2017). The effects of the construct 'belonging' on occupational well-being become evident when the social environments of adolescents are studied (Hammell, 2015a, pp. 45,46). Adolescents who experience a sense of belonging (especially within their family structures) seem to have better occupational well-being and more secure occupational identities.

Considering the specific environmental factors facing adolescents living in South Africa, is also important to better understand the impact the environment plays on their occupational well-being. Adolescents between the ages of 13 and 17 currently living in South Africa, are part of the group referred to by researchers and politicians as the 'born frees'. This group of young people were born after the fall of apartheid in 1994 and have been receiving many promises of a 'better future' (Burns *et al.*, 2015, p. 83; De Lannoy *et al.*, 2015, p. 22). Unfortunately, despite these promises, many adolescents (especially those from previously disadvantaged backgrounds) still face inequalities relating to race and social class. Furthermore, many South African adolescents also face challenges including poverty, poor parental care, poor quality education and limited opportunities for tertiary education (Radebe, 2017, p. 8). These situations are leading to a group of young people who are experiencing hopelessness, heightened by high school drop-out and un(der) employment rates (De Lannoy *et al.*, 2015, p. 22). Furthermore, many adolescents living in South Africa feel trapped in what is referred to as 'the poverty cycle'. These adolescents start their lives with restricted resources and opportunities, and due to this, struggle to break free from a life of poverty (Burns *et al.*, 2015, p. 83; De Lannoy *et al.*, 2015, p. 25). These

factors in their environments all contribute to the adolescents of South Africa being a particularly vulnerable group in terms of occupational marginalisation and limited occupational possibilities (De Lannoy *et al.*, 2015, p. 22).

In the light of the global concern regarding the well-being of adolescents (Every Woman Every Child, 2016, p. 10; World Health Organization, 2017, p. iii), the need for holistic interventions for adolescents has been identified on international, national and provincial levels. In the next section, literature explaining the strategies that are in place for better supporting adolescents will be reviewed.

2.3.3. Governmental strategies for supporting adolescents

2.3.3.1. International and national strategies for supporting adolescents

On international level, the health and well-being of adolescents are garnering more attention, with many countries recognising the need for specific strategies to promote the health and well-being of adolescents separately from children and adults (Every Woman Every Child, 2016, p. 10; World Health Organization, 2017, p. xxi). Occupational therapists need to be informed of these global focusses in terms of adolescent well-being, in order to keep occupational therapy on par with international interdisciplinary focusses. One important document that can inform occupational therapists working with adolescents about global adolescent well-being strategies, is the United Nations' *Transforming our World: the 2030 Agenda for Sustainable Development* consisting of 17 sustainable development goals that should be achieved by 2030 (United Nations, 2015, p. 18). South Africa is one of the countries that has bought into this agenda for sustainable development.

Out of the 17 sustainable development goals, 10 include specific indicators applicable to children and adolescents. These 10 goals are: (1) no poverty, (2) ending hunger, (3) good health and well-being, (4) quality education, (5) gender equality, (6) clean water and sanitation, (8) decent work and economic growth, (10) reduced inequalities, (11) sustainable cities and communities, and (16) peace, justice and strong institutions (United Nations, 2015, p. 18). If these goals are not met in the lives of adolescents, occupational well-being is severely restricted. For example, without clean water and sanitation, adolescents' occupational well-being is at serious risk.

On a national level, South Africa has made some progress over the last few years regarding the 2030 Sustainable Development goals. However, as seen in the previous sections, there are still many challenges that need attention for the goals to be completely met (Bhardwaj *et al.*, 2017, p. 29). Furthermore, the need has been identified to develop child- and adolescent mental health policies in South Africa, especially on a provincial level (Mokitimi, Schneider and De Vries, 2018, p. 1). South African adolescents' occupational well-being is at risk due to the occupational restrictions that are prevalent in many communities with limited resources (as mentioned in previous sections), thus the South African government's role in bringing about change should be recognised and support should be provided where possible (World Health Organization, 2017, p. xix).

At a provincial level, the Western Cape province is taking ownership of better supporting adolescents. The province released a specific strategy for developing youth. This strategy will be reviewed in the following section.

2.3.3.2. Provincial strategies

In 2013, the Western Cape Government released the *Western Cape Youth Development Strategy*. The strategy was developed to provide better support for young people in the Western Cape between the ages of 10 and 24 years. The motivation for developing the strategy was the challenges that young people in the Western Cape face in terms of family structures, education, violence and substance exposure and minimal employment opportunities (Western Cape Government, 2013, p. 5). Occupational therapists working with adolescents in community-based settings in the Western Cape need to familiarise themselves with this strategy in order to be contextually relevant in their work and to follow the direction provided by the government.

Five pillars to adolescent well-being are identified in the strategy, namely: strengthening **families**, improving **education** and training, access to **economic** opportunities, providing a sense of **belonging** and **reconnecting** socially excluded youth (Western Cape Government, 2013, p. 3). When studying these pillars from an occupational science point of view, a strong connection is found to concepts such as productivity, pleasure and restoration (Pierce, 2003, p. 38), co-occupations (Pickens

and Barnekow, 2009, p. 152) and occupational choice (Galvaan, 2015, p. 39). This correlation between the pillars from the strategy and occupational science literature is why it seemed appropriate to describe the pillars in more depth (see Table 1).

TABLE 1: PILLARS FROM WESTERN CAPE'S YOUTH DEVELOPMENT STRATEGY (WESTERN CAPE GOVERNMENT, 2013, P. 7)

Pillar	Objective	Programmes
Family foundations	To have a critical mass of parents with effective parenting skills and support networks to support positive youth development	<ul style="list-style-type: none"> • Family and parenting support • Health and psycho-social services • Health literacy • Community role-models ambassador programme
Education and training	To ensure youth are literate, numerate and prepared for life and work	<ul style="list-style-type: none"> • Quality education • School retention • Structured after-school activities • Skills development & intermediation
Economic opportunities	To provide opportunities for youth to have expanded work and labour market prospects	<ul style="list-style-type: none"> • Improved connections between youth and jobs and links to work experiences • Subsidised work programme • Employment intermediation services • Financial literacy
Identity and belonging	To ensure youth are able to identify with positive influences in their lives which promote a sense of belonging and agency	<ul style="list-style-type: none"> • Peer support and networks • Sport, music, art and culture opportunities as a tool for development • Youth spaces & networks • Positive images of youth • Leadership development
Reconnection opportunities	To facilitate the reconnection of youth by providing effective	<ul style="list-style-type: none"> • Active programmes to engage disconnected youth

	services and support to reconnect, strengthen resilience and enable positive development	<ul style="list-style-type: none"> • Positive footsteps programmes • Skills and work intermediation
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This Western Cape's Youth Development Strategy appears to be holistic and thorough. The pillars, objectives and programmes of the Youth Development Strategy correlate strongly with occupational therapy's focus on holistic intervention by including occupations that provide productivity, pleasure and restoration (Pierce, 2003, p. 38). Occupational therapists working with adolescents in community settings can use these pillars as a guide to ensure that their interventions are congruent with the current provincial focus. This adds credibility and the advantages of interdisciplinary effort to our work with adolescents in communities.

In this section, adolescents living in communities with socio-economic challenges were described by looking at: adolescence as a life stage, the influence of environmental factors on adolescents and on governmental strategies that are in place to support adolescents. This group of individuals is particularly vulnerable to occupational injustices due to the specific characteristics accompanying the developmental phase and the occupational restrictions presented by environments where poverty is present. However, they are also a group with great potential, the future leaders of this nation (Sawyer *et al.*, 2012, p. 1630; Harrison, 2017, p. 44; World Health Organization, 2017, p. iii). The importance of impacting adolescents' lives is confirmed by Flavia Bustreo, the Assistant Director-General of Family, Women's and Children's Health at the World Health Organization when she wrote: *"Investments in adolescent health bring a triple dividend of benefits for adolescents now, for their future adult lives, and for the next generation. Their health and well-being are engines of change in the drive to create healthier, more sustainable societies."* For this reason, adolescents were chosen as the population group for this study.

As an occupational therapist, the researcher's main concern regarding the adolescents of the Groendal community is their occupational well-being. The focus for this study is on finding out which environmental factors in Groendal enable occupational well-being for these adolescents. Yet, before this can be done, a clear

understanding of the term occupational well-being is needed. This will be discussed in the following section.

2.4. OCCUPATIONAL WELL-BEING: A KEY TO OCCUPATIONAL JUSTICE



The third part of this literature review will discuss the meaning of the concept, occupational well-being. The literature that was used to form an operational definition for this term will be reviewed and discussed. When referring to the analogy explaining this study, ‘occupational well-being’ is represented by the fruit bearing of the young olive trees. An olive tree that can bear fruit is a tree that is able to utilise the resources in its environment, despite challenging circumstances.

Firstly, definitions for the terms ‘occupation’ and ‘well-being’ will be reviewed separately. Thereafter, the combined term, ‘occupational well-being’, will be discussed. Lastly, the concept of occupational justice will be explored to understand the role it plays in occupational well-being. This will be done to explain why this specific concept was found to be the most suitable for the purposes of this study.

2.4.1. Defining occupational well-being

2.4.1.1. Exploring the concept ‘occupation’

The term ‘occupation’ stands central in occupational therapy as a profession. Occupational therapists view occupations as critical to people’s identity and use them as a means or an end in therapeutic interventions with clients (American Occupational Therapy Association, 2014, p. S5). Several definitions for ‘occupations’ can be found in literature. Some of these definitions will be reviewed to gain a deeper understanding of the concept.

- *“A group of activities that has personal and sociocultural meaning, is named within a culture and supports participation in society. Occupations can be categorised as self-care, productivity and/or leisure” (Creek, 2014, p. 35)*

- *...the daily life activities in which people engage. Occupations occur in context and are influenced by the interplay among client factors, performance skills, and performance patterns. Occupations occur over time; have purpose, meaning, and perceived utility to the client; and can be observed by others (e.g., preparing a meal) or be known only to the person involved (e.g., learning through reading a textbook). Occupations can involve the execution of multiple activities for completion and can result in various outcomes (American Occupational Therapy Association, 2014, p. S5)*
- *In occupational therapy, occupations refer to the everyday activities that people do as individuals, in families and with communities to occupy time and bring meaning and purpose to life. Occupations include things people need to, want to and are expected to do (World Federation of Occupational Therapists, 2018)*

However, even though these definitions help to give a universal language to occupational therapists, providing a single definition for the term ‘occupation’ could be problematic. The reason for this is that by universally defining ‘occupations’, we can unknowingly misrepresent the experiences of people from different cultural and contextual backgrounds (Motimele and Peters, 2017, p. 2).

The classification of occupations aids therapists to direct therapy and to provide a universal language between therapists. The OTPF (American Occupational Therapy Association, 2014, pp. S19–S21), for example, classifies occupations into 8 main categories called:

- Activities of daily living (ADL’s)
- Instrumental activities of daily living (IADL’s)
- Rest and sleep
- Education
- Work
- Play
- Leisure and
- Social participation.

These eight occupational categories differ between individuals and communities and contribute in different degrees to the well-being of people (American Occupational Therapy Association, 2014, pp. S19–S21). However, the traditional categorisation of occupations should also be critically considered, especially when working in cultural contexts which are not middle-class and mainly westernised. The rigid categorisation of occupations could disregard the subjective occupational experiences of communities (Motimele and Peters, 2017, p. 10). Hammell suggested that categorising occupations based on the lived experiences of people could be more appropriate (Hammell, 2009, p. 107). She suggested the following categories as more appropriate: “Restorative occupations”, “Occupations fostering belonging, connectedness and contributing”, “Engaging in doing occupations”, and “Occupations reflecting life continuity and hope for the future”. These four categories (Hammell, 2009, pp. 110–112) will be described in Table 2.

TABLE 2: POTENTIAL CATEGORIES FOR OCCUPATIONS BY HAMMELL (HAMMELL, 2009, PP. 110–112)

Occupational Category	Description
Restorative occupations	Engaging in occupations that contribute to well-being. Might be especially prominent in challenging circumstances. Not necessarily goal-orientated or purposeful. Engagement is mainly for experiencing satisfaction and reward.
Occupations fostering belonging, connectedness and contribution	Occupations that give opportunities for connecting with others and provide a sense of belonging. This includes occupations done with and for other people. Importance of interdependence is stressed in this category.
Engaging in doing occupations	Occupations related to things people want or need to do. The occupations can either provide a sense of accomplishment or could be perceived as boring. Any doing is included – positive or negative.
Occupations reflecting life continuity and hope for the future	This category especially relates to people experiencing life crises. It states that current occupations have an impact on the future.

These categories suggested by Hammell can again seem too vague and extensive in certain therapy contexts. A combination of the two could be appropriate, where the categories of the OTPF are used to structure the therapist’s approach, but where the

subjective occupational experiences of people are still strongly considered. This study aimed to explore the subjective occupational experiences of adolescents in the Groendal community, echoing Hammell's plea to consider the lived occupational lives of people.

In the following section the term well-being will be explored, to move closer towards a definition for the term 'occupational well-being'.

2.4.1.2. Exploring the concept 'well-being'

According to the OTPF, 'well-being' is one of the main outcomes of the occupational therapy process (American Occupational Therapy Association, 2014, p. S34). This term had received a lot of attention since it was conceptually bound together with the term 'health' by the World Health Organisation in 1946 when health was defined as: "*a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity*" (World Health Organization, 1946, p. 1). Other definitions of the term well-being include:

- OTPF: "*Contentment with one's health, self-esteem, sense of belonging, security, and opportunities for self-determination, meaning, roles, and helping others*" (American Occupational Therapy Association, 2014, p. S35)
- International Classification of Functioning and Disability and Health: "*Well-being is a general term encompassing the total universe of human life domains, including physical, mental and social aspects, that make up what can be called a 'good life'*" (World Health Organization, 2007, p. 211).

Despite the popularity of the term well-being regarding health and in occupational therapy, the term seems to be poorly defined and understood. Furthermore, achieving the outcome of 'well-being' in clients seems to be hard to measure, since the meaning of the term could differ depending on individual interpretations and population groups (Aldrich, 2011, p. 93; Fieldhouse and Bannigan, 2014, p. 16). Aldrich (2011) wrote a review and critique on the use of the term well-being (or wellbeing or well being) in occupational therapy. In her review she noted that the use of the term well-being in

occupational therapy literature is inconsistent in terms of meaning and application (Aldrich, 2011, p. 93).

However, finding a standardised definition for the term well-being can present us with challenges in itself, since the individual's or culture's experience of what well-being is can be undermined in the process (Fieldhouse and Bannigan, 2014, p. 17). When considering the vast differences in the occupational lives of people over the world, it seems that occupational therapy should provide clients with the necessary space to express their own views on what well-being is (Fieldhouse and Bannigan, 2014, p. 17). This will remain more accurate to the lived occupational experiences of people from different cultural contexts and minimise the chances of occupational therapy's contribution to the very occupational deprivations that it aims to inhibit.

In conclusion, finding a one size fits all definition for the term well-being does not seem appropriate, considering the individual and cultural differences that play a role in what we perceive as a good life. In the light of this, the term *occupational well-being* was chosen for this study, since it focusses the attention on well-being specifically related to the *occupations* that adolescents participate in. In the researcher's view this made the term less vague. The concept of occupational well-being will be described in the following section.

2.4.1.3. Exploring the concept 'occupational well-being'

In the process of refining the research question, it was determined that describing enablers to 'well-being' alone, was going to be problematic, in the light of the discussion in the previous section. It was then decided to narrow the concept down by looking at enablers to well-being that specifically relate to the *occupations* the adolescents participate in. The term that was chosen for use throughout the study was 'occupational well-being'.

The concept of occupational well-being was introduced by Doble and Santha in 2008, with the purpose of moving the focus in occupational therapy from mere occupational participation to the individual's subjective experience of occupations (Doble and Santha, 2008, p. 184). They argued that occupational well-being can be achieved if people have the opportunity to freely engage in occupations of their choice and if they are able to structure their lives in such a way that their occupational needs are

consistently met (Doble and Santha, 2008, p. 186). They defined occupational well-being as: *“the meaning and satisfaction that individuals derive from their occupational lives”* (Doble and Santha, 2008, p. 186). This can be facilitated by occupational therapists through direct client intervention or by indirectly influencing the environmental or organisational contexts of clients (Doble and Santha, 2008, p. 184). Furthermore, several factors have been identified that influence occupational well-being. These include: personal and environmental factors, the available occupational opportunities that people have access to and remembering that different individuals place varying levels of importance on specific occupational needs (Doble and Santha, 2008, p. 188)

Doble and Santha (2008, p.186) identified seven occupational needs that must be met for people to experience occupational well-being. These occupational needs are: accomplishment, affirmation, agency, coherence, companionship, pleasure and renewal. These seven occupational needs will be described in Table 3.

TABLE 3: SEVEN OCCUPATIONAL NEEDS LEADING TO OCCUPATIONAL WELL-BEING (DOBLE AND SANTHA, 2008, PP. 186–187)

Occupational need	Description
Accomplishment	The need for engaging in occupations that generate evidence of mastering skills, meeting expectations and achieving goals.
Affirmation	The need for recognition that one’s occupational choices are important, worthwhile and valued.
Agency	The need to exert influence or control in important or valued aspects of one’s occupational life.
Coherence	The need to participate in occupations that give evidence of who someone is and what they want to become.
Companionship	The need to participate in occupations with others.
Pleasure	The need to participate in occupations that bring forth satisfaction through contentment, happiness or joy.
Renewal	The need for participation in occupations that bring peace, relief, mental clarity and make one feel refreshed and rested.

These seven occupational needs seem comprehensive and well defined. In studying this literature, it became clearer that these seven occupational needs are essential for individuals or communities to experience occupational justice. In the next section,

the connection between occupational well-being and occupational justice will be described in order to understand the significance of researching factors that enable occupational well-being in marginalised communities.

2.4.2. Looking at occupational well-being from an occupational justice perspective

While studying the literature regarding occupational well-being, it became evident that occupational well-being is closely intertwined with the concept ‘occupational justice’. Especially in a context like the community of Groendal, where adolescents are exposed to a variety of occupational restrictions, considering occupational justice plays a critical role in gaining a holistic understanding of the occupational well-being of individuals (Bailliard and Aldrich, 2017, p. 83). In this section, occupational justice will be described as it relates to occupational well-being.

Wilcock and Townsend, two seminal authors in the field of occupational justice, wrote that occupational justice is embedded in the belief that people are occupational beings, whose well-being is closely linked to the opportunity they have to participate in occupations that are meaningful to them (Wilcock and Townsend, 2004, p. 80). Therefore occupational injustice occurs when participation in meaningful occupations is restricted, due to a variety of reasons such as ill health, poverty, discrimination or lack of resources (which is the case in the community of Groendal) (Durocher *et al.*, 2014, p. 420; Bailliard and Aldrich, 2017, p. 83).

The five main occupational risk factors, which inhibit occupational justice (and therefore also occupational well-being) are occupational alienation, occupational apartheid, occupational deprivation, occupational marginalisation, and occupational imbalance (Wilcock and Townsend, 2004, p. 75; Durocher, 2017, p. 10). These occupational risk factors (Wilcock and Townsend, 2004, pp. 80–81; Durocher *et al.*, 2014, pp. 421–422; Durocher, 2017, pp. 10–12) will be described in Table 4.

TABLE 4: OCCUPATIONAL RISK FACTORS' DESCRIPTIONS (WILCOCK AND TOWNSEND, 2004, PP. 80–81; DUROCHER ET AL., 2014, PP. 421–422; DUROCHER, 2017, PP. 10–12)

Occupational risk factor	Description
Occupational alienation	A feeling of meaninglessness caused by the lack of opportunity to participate in meaningful and enriching occupations. Also described as the impositions of participations in occupations that are not meaningful.
Occupational apartheid	When individuals or communities are denied access to certain occupations based on personal characteristics.
Occupational deprivation	Factors outside of an individual's or community's control that hinder them from optimally engaging in occupations that are meaningful to them.
Occupational marginalisation	The exclusion of certain individuals or communities from certain participation in occupations due to unseen discriminating norms and standards.
Occupational imbalance	A lack of healthy balance between the different occupations that an individual or community engage in.

Based on these occupational risk factors, four occupational rights have been identified by Townsend and Wilcock, namely the right: “to experience meaning and enrichment in one’s occupations; to participate in a range of occupations for health and social inclusion; to make choices and share decision-making power in daily life; and to receive equal privileges for diverse participation in occupations” (Wilcock and Townsend, 2004, p. 75). These four occupational rights are essential if occupational well-being is to be obtained in the community of Groendal, especially when recognising that justice is a fundamental aspect of an occupational view on health (Hocking and Townsend, 2015, p. 1).

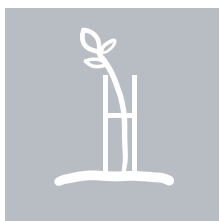
Unfortunately, as seen in the previous sections of this chapter, the adolescents in Groendal are at high risk of experiencing occupational injustice due to occupational risk factors. Occupational deprivation can occur due to the impact of factors outside of their control like poverty, socio-economic and cultural discrimination, family structures, etc. which inhibit optimal occupational participation (Durocher, 2017, p. 11). Occupational marginalisation can occur due to unseen (and many times unacknowledged) discrimination based on cultural and socio-economic differences

(Durocher, 2017, p. 11). This is especially true in this community with its extreme gap between the rich and the poor. Occupational imbalance is also a threat for adolescents in Groendal, since limited resources cause limited access to occupational possibilities, which could disrupt the balance in their occupational lives (Durocher, 2017, p. 11).

In conclusion, the previous section defined occupational well-being by firstly looking at the concepts: 'occupation' and 'well-being' separately. Thereafter, the combined concept of 'occupational well-being' was described. Lastly, the role that occupational justice plays in achieving occupational well-being was explored. By describing these concepts, the motivation for choosing the term 'occupational well-being' rather than merely 'well-being' was provided. Furthermore, occupational justice principles were utilised to explain why occupational well-being is an important concept to examine in adolescents living in communities with limited resources, especially in the light of the occupational injustices that occur due to occupational marginalisation, -deprivation and imbalance.

An important enabler or barrier to occupational well-being is the environment (Doble and Santha, 2008, p. 187). The evaluation, adaptation and optimisation of environmental factors, in order to promote occupational well-being, form an integral part of occupational therapy practice (Stark and Sanford, 2005, p. 300). In the following section environmental factors' influence on occupational well-being will be explored.

2.5. THE ENVIRONMENT: A POSSIBLE ENABLER TO OCCUPATIONAL WELL-BEING



The fourth and final section of the literature review chapter will discuss the potential that environmental factors have to enable occupational well-being of people. When referring to the analogy that explains the study, the environmental factors that enable occupational well-being are the support beams that are planted around the young olive trees to keep them upright in the harsh weather conditions. In other words, the support beams are strategically placed in the young tree's context

in order to promote growth and ultimately lead to fruit bearing (occupational well-being).

Firstly, occupational therapy literature will be reviewed to gain a better understanding of how environmental factors impact occupational well-being of individuals and communities. Secondly, literature will be examined to describe ways to categorise environmental factors. This will be done to motivate why it was decided to specifically focus on describing *environmental factors* that enable occupational well-being of adolescents.

2.5.1. How the environment impacts occupational well-being

The World Federation of Occupational therapy states that: “*Occupational therapists believe that participation can be supported or restricted by the...**physical, social, cultural, attitudinal and legislative environments***” (World Federation of Occupational Therapists, 2012). Within the field of occupational science – a foundational discipline of occupational therapy – environmental factors are regarded as an essential influencer of human occupational engagement (Stark and Sanford, 2005, p. 299; Townsend *et al.*, 2009, p. 50; Galvaan, 2015, p. 49). No occupation can be separated from the context in which it occurs and a holistic view of a person and their occupational participation requires an understanding of the context and environment where the person finds him/herself (Pierce, 2001, p. 249; Galvaan, 2017, p. 50; Motimele and Peters, 2017, p. 13). Environmental factors can hinder and/or promote occupational well-being and it is therefore an important aspect to consider in occupational therapy intervention (Stark and Sanford, 2005, p. 300; Townsend *et al.*, 2009, p. 50). This is especially evident in communities like Groendal, where socio-economic and socio-cultural discrimination limit occupational possibilities and lead to occupational deprivation and -marginalisation.

There are several frameworks and models in occupational therapy that describe the importance of the environment’s role in occupational therapy intervention. Some of these models include the Model of Human Occupation (MOHO) (Turpin and Iwama, 2011, pp. 137–158), the Canadian model of Occupational Performance and Engagement (CMOP-E) (Turpin and Iwama, 2011, pp. 117–136), the Kawa model (Turpin and Iwama, 2011, pp. 159–178) and the Person-Environment-Occupational-

Performance (PEOP) Model (Turpin and Iwama, 2011, pp. 89–99). The PEOP model was found to be particularly helpful in understanding the impact of environmental factors on the well-being of individuals and communities, due to the prominent focus it places on the environment.

It should be mentioned that the models and frameworks that will be described in the following sections were developed in western contexts. The applicability of these models and frameworks should therefore be carefully considered when applying them to contexts in the Global South. When working in contexts that are impacted by poverty, marginalisation and discrimination, the occupational therapist especially needs to approach the community with ‘cultural humility’. This entails being willing to admit one’s lack of knowledge and be flexible enough to learn from the community members regarding what carries meaning in their context (Beagan, 2015, p. 277). It is from this position of cultural humility that the following literature is approached: acknowledging the value of the information developed by skilled therapists and theorists, but also being open to adapt when cultural discrepancies occur.

2.5.1.1. Person-Environment-Occupational Performance (PEOP) model

The PEOP model, is a model in occupational therapy that places significant focus on the effect of the environment on occupational well-being. This model will be discussed in this section to facilitate understanding the impact of environmental factors on occupational well-being.

The PEOP can be used in the planning of intervention for individuals, groups and populations (Baum, Bass-Haugen and Christiansen, 2005, p. 376). It provides therapists with situational analyses for intervention on all three of these levels. These situational analyses provide step by step guidance for planning intervention for either a person, an organisation or a community (Baum *et al.*, 2005, pp. 378, 380, 383). The analyses start with guidelines on gathering information regarding the client’s occupational history and their perception of what has happened. It then gives opportunity to hear what the client’s short-term and long-term goals are and to match these goals with occupational therapy goals. After this stage, it provides guidelines for the practitioner’s assessment of the client’s intrinsic, extrinsic and occupational

domains (Christiansen, Baum and Bass, 2011, p.93). This study is positioned within the first

As seen in figure 7 (Turpin and Iwama, 2011, p. 91), the model identifies three main domains of focus for occupational therapy practice, namely: **Person** (intrinsic factors), **Environment** (extrinsic factors) and **Occupations**. These three domains should be utilised, in collaboration with the client, to reach outcomes that can achieve occupational performance and participation that will ultimately lead to well-being and quality of for clients (Christiansen *et al.* 2011, p.93). The PEOP thus strongly states that well-being cannot be obtained without considering the environment's impact on individuals and communities. In other words, even though the intrinsic factors of an individual or community would all be without defect, if the environment is not healthy and supportive, occupational well-being cannot be achieved (Turpin and Iwama 2011, p.92; Baum *et al.* 2005, p.376).

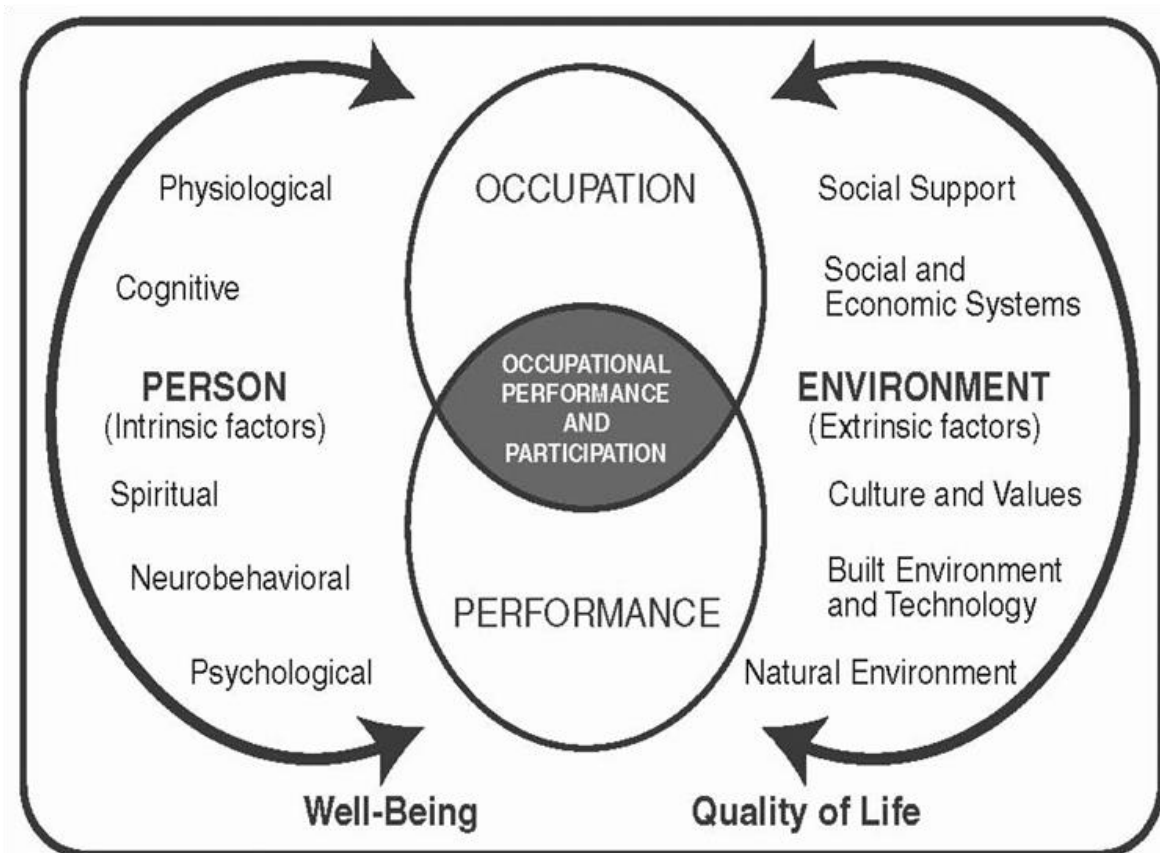


FIGURE 7: PERSON-ENVIRONMENT-OCCUPATIONAL -PERFORMANCE (PEOP) MODEL (TURPIN AND IWAMA, 2011, P. 91)

After looking at the PEOP model's description of how environmental factors influence occupational well-being, a brief overview will also be given of other occupational

therapy models that describe the connection between environments and occupational well-being.

2.5.1.2. Other occupational therapy models describing environment

Other than the PEOP model, there are other occupational therapy models that also emphasise the importance of the environment in people's occupational lives. Some of these models' descriptions of the environment's role in influencing occupational well-being will be briefly stated below.

- **The Canadian Model of Occupational Performance and Engagement (CMOP-E):** *“The CMOP-E depicts the person embedded within the environments to indicate that each individual lives within a unique environmental context – cultural, institutional, physical and social – which affords occupational possibilities”* (Turpin and Iwama, 2011, p. 118)
- **Model of Human Occupation (MOHO):** *“The context within which an individual performs occupation shapes all three components of human performance – volition, habituation and performance – which motivate, organise and carry out occupation, respectively”* (Turpin and Iwama, 2011, p. 144)
- **Kawa model:** The river walls and the river floor represent the environment or context of a person's life in the Kawa model, specifically referring to their physical and social environments (Turpin and Iwama, 2011b, p. 163). *“These (physical and social environments) are perhaps the most important determinants of a person's life flow in a collectivist social context because of the primacy afforded to the environmental context in determining the experiences of self and subsequent meanings of personal action”* (Turpin and Iwama, 2011, p. 163)

The occupational therapy models that were studied adequately explained the interaction between the environment and well-being, but lacked the necessary detailed classification of environmental factors that was needed for this study. Other occupational therapy literature and frameworks were consulted to find the appropriate classification of environmental factors. This was necessary since the methodology

that was chosen for this study required a structured and detailed classification of environmental factors that would be used to develop the data gathering tool. The results that were found will be described in the following section.

2.5.2. Classification of environmental factors

As literature regarding environmental factors were studied, two specific sources were found to be most suitable for the purposes of this study. These two sources were the Occupational Therapy Practice Framework: domain and process (OTPF) and the International Classification of Functioning, Disability and Health, Children and Youth Version (ICF-CY). The classifications found in these documents were used as a guide in the development of the research methodology.

2.5.2.1. OTPF

The Occupational Therapy Practice Framework: domain and process (OTPF) emphasises the importance of the environment for occupational well-being. In the framework, a distinction is made between environment and context. The environment consists of the physical- and social environment. And the context refers to less tangible elements in the surroundings namely, cultural, personal, temporal, and virtual (American Occupational Therapy Association, 2014, p. S8). For this specific study, the ‘environment’ category of the OTPF was used and not the contextual category, i.e. physical- and social environmental factors were described. The reason for this was, as the OTPF rightly states, that the contextual classifications are more abstract and therefore harder to identify and single out (American Occupational Therapy Association, 2014, p. S8). The physical- and social environmental factors are more concrete to identify, and this complied with the methodology that was chosen for the data gathering procedures.

The **physical environment** is described in the OTPF as “*the natural (e.g., geographic terrain, plants) and built (e.g., buildings, furniture) surroundings in which daily life occupations occur*”. The **social environment** is described as “*the presence of, relationships with, and expectations of persons, groups, and populations with whom clients have contact (e.g., availability and expectations of significant individuals, such as spouse, friends, and caregivers)*”. For the purposes of this study, the natural category of the physical environment was not included, since the geography, climate

and natural vegetation of the Groendal community are fixed and cannot be influenced to improve occupational well-being.

After deciding on focussing specifically on the physical- and social environments for this study, a detailed classification system of these environmental factors was needed. The International Classification of Functioning, Disability and Health, Children and Youth Version (ICF-CY) was found to provide the most detailed classification system for physical- and social environmental factors and will be described in the following section.

2.5.2.2. ICF-CY

Although the definitions from the OTPF adequately describe the terms “physical- and social environments”, the need for a more detailed breakdown of these concepts arose, since the methodology required this as part of the data gathering process. The International Classification of Functioning, Disability and Health, Children and Youth Version (ICF-CY) was found to give the most in-depth classification of physical and social environmental factors and will therefore be described in this section.

The ICF-CY is an inter-professionally recognised classification tool that aims to provide health care workers with a universal language to describe health and health related components of well-being (World Health Organization, 2001, p. 3). For this reason, it was found applicable to be used as a guide in this study. The ICF was developed by the World Health Organisation (WHO) and in 2007 the Children and Youth Version of the ICF (ICF-CY) was released (World Health Organization, 2007). In the ICF-CY environmental factors are described as factors “*that make up the physical, social and attitudinal environment in which people live and conduct their lives*” (World Health Organization, 2007, p. 10).

Even though the ICF is widely recognised by occupational therapists as a helpful tool in therapy, it is however criticised by some to be too grounded in the medical model, leaving little room for people’s subjective occupational experiences (Dsouza, 2017, p. 167). Furthermore, the ICF was also developed in the West, and therefore lacks insight into culturally relevant occupations of people from the Global South. The limitations of the ICF were considered when choosing an appropriate framework, and

was still considered to be the most suitable for providing a detailed classification of environmental factors.

For the purposes of this specific study, two of the sub-categories of environmental factors that are classified in the ICF-CY will be used, namely: “**products and technology**” (World Health Organization, 2007, p. 191) and “**support and relationships**” (World Health Organization, 2007, p. 205). **Products and technology** are defined as: “*natural or human-made products or systems of products, equipment and technology in an individual’s immediate environment that are gathered, created, produced or manufactured*” (World Health Organization, 2007, p. 191). **Support and relationships** are defined as: “*people or animals that provide practical physical or emotional support, nurturing, protection, assistance and relationships to other persons, in their home, place of work, school or at play or in other aspects of their daily activities*” (World Health Organization, 2007, p. 205).

These two categories were selected since they relate to the definitions in the OTPF for physical- and social environmental factors - which are the focus areas for this study. These two sub-categories are divided into several subdivisions that are all well described in the ICF and the full definitions for all the applicable sub-categories can be seen in *Appendix B* of this document. A summary of the categories is presented in Table 5. It should be noted that the ICF includes environmental factors that are specifically relevant to people with disabilities. These categories were not included in this study, since this study did not primarily focus on the impact of environmental factors on people with disabilities in this population.

Table 5: ICF-CY sub-categories (World Health Organization, 2007, pp. 191–199, 205–206)

Products and Technology (physical environment)	Support and relationships (social environment)
<ul style="list-style-type: none"> • Products and technology for personal consumption • Products and technology for personal use in daily living • Products and technology for indoor and outdoor mobility and transport • Products for communication 	<ul style="list-style-type: none"> • Immediate family • Extended family • Friends • Acquaintances, peer, colleagues, neighbours and community members • People in positions of authority

<ul style="list-style-type: none"> • Products and technology for education • Products and technology for employment • Products and technology for culture, recreation and sport • Products and technology for the practice of religion and spirituality • Design, construction and building products and technology of buildings for public use • Products and technology of land development • Assets • Products and technology, other specified. • Products and technology, unspecified. <p>(World Health Organization, 2007, pp. 191–199)</p>	<ul style="list-style-type: none"> • People in subordinate positions • Personal care provider and personal assistants • Strangers • Domesticated animals • Health professionals • Other professionals • Support and relationships, other specified • Support and relationships, unspecified <p>(World Health Organization, 2007, pp. 205–206)</p>
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The ICF-CY's categories of environmental factors were found to be structured and comprehensive and were therefore used in the development of the methodology of this research. The classification provided concrete examples of environmental factors that could be expanded upon in data gathering among adolescents from the Groendal community.

In summary, the fourth section of this chapter described the important role that environmental factors play in the occupational well-being of individuals as described by relevant models in occupational therapy. Furthermore, the classification system of physical- and social environmental factors from the OTPF and ICF-CY was described in order to motivate why they were chosen for the purposes of this study. Through this section, the aim was to motivate why the environment is a major role player in the occupational well-being of adolescents living in communities with limited access to resources due to socio-economic constraints. When referring to the analogy for this study, the support beams around the young trees enable the trees to withstand harsh weather circumstances.

2.6. CONCLUSION

In Chapter 2, the four main concepts of this study were described and expanded upon using literature to motivate why this specific research topic was chosen. These four concepts were explained by referring to the olive tree analogy. The four concepts that were described were: (1) communities with limited resources (the stormy weather), (2) adolescents (the young olive trees), (3) occupational well-being (fruit bearing of the trees) and (4) the environment (support beams). Through this literature review, the importance of describing environmental factors that enable occupational well-being for adolescents living in the Groendal community was highlighted.

The words of Robert Gilligan will be used to conclude this literature review, since it summarises the hope that this study carries despite the challenging realities that adolescents in Groendal face:

Even in the most barren social landscape there are likely to be at least some resources and supports which can be tapped into. To the discerning and optimistic eye, the child's natural social context is a reservoir of informal supports and resources often lying ready to be tapped and mobilised (Daniel, Wassel and Gilligan, 2010, p. 257).

In the following chapter, Chapter 3, the methodology that was used to describe the environmental factors that enabled occupational well-being for adolescents in Groendal will be described.

CHAPTER 3

Research Methodology

3.1. INTRODUCTION

In Chapter 2 an overview of literature was given regarding the main concepts in this study, namely: 1) communities with limited resources, 2) adolescents, 3) occupational well-being, and 4) environmental factors. In Chapter 3, the research methodology that was used to answer the research question will be described.

In the pursuit of answering the research question, quantitative and qualitative research options were considered. None of these seemed to accurately answer the research question or to correlate adequately with the researcher's ontological position. However, a research methodology called Q methodology, which is a form of mixed methodology that falls within the pragmatic paradigm (Delpont and Fouchè, 2011, p. 434), was then discovered and found to be the most appropriate. This method provided a way to combine the strengths of quantitative and qualitative methodologies by measuring subjectivity with numerical data.

In Chapter 3, the method of enquiry will be described by expanding on the type of study design, method of enquiry and trustworthiness of the study. Thereafter, the ethical considerations for this specific study will be discussed.

3.2. INTRODUCING Q METHODOLOGY AS A STUDY DESIGN

Before describing the details of the methodology of this study, some information about Q methodology as a study design will be provided for orientation and motivation for its choice. The term 'study design' refers to the different strategies that are available to a researcher to answer their research question within the paradigm that the research is positioned in (Fouchè and Schurink, 2011, p. 308). This study made use of a **mixed method** study design. Within the mixed methods research approach a researcher can choose between a variety of study designs based on the nature of the research that will be done (Delpont and Fouchè, 2011, p. 434). This study was conducted using a specific mixed method type called, **Q methodology**. It has been classified as a mixed methods study design by a number of researchers (Watts and Stenner, 2005, p. 86; Naude, 2016, p. 398; Ramlo, 2016, pp. 28–29; Yang, 2016, pp.

43–44). According to Steven R. Brown, a seminal author on Q studies, Q methodology combines the strengths of qualitative and quantitative study approaches in order to study *subjectivity* (Brown, 1996, p. 562). Q methodology is a method that is used to systematically study subjective issues, such as opinions, beliefs, behaviours, and attitudes and it values the individual's experience as central in research, (Naude, 2016, pp. 395–396). The qualitative component of Q methodology focusses on describing how and why people think in certain subjective ways. The quantitative aspect involves using factor analytical techniques in order to provide numerical data (Brown, 2004, p. 1; Naude, 2016, p. 399).

Q methodology was chosen for this study since it provided a way to determine the subjective viewpoints of adolescents in Groendal in a manner that was rigorous through concrete quantitative findings, but still gave a more contextually situated understanding of the studied topic. Furthermore, the emphasis in Q methodology on providing *holistic* (by-person) data, rather than atomised or fragmented data (as in other by-item methodologies) was particularly attractive in the light of occupational therapy's concern with the person as a whole (Watts and Stenner, 2012, p. 176; American Occupational Therapy Association, 2014, p. S4). Thus, Q methodology provided a way to explore the participants' subjective occupational experiences in a way that was numerically rigorous, yet with qualitative depth.

According to Q methodology literature, every Q study has five distinct stages. The five stages for the executing of a Q study are: **1) generating a Q set, 2) selecting a P-set, 3) Q sorting, 4) Q sort analysis and 5) factor interpretation** (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 401–402). Figure 8 provides a basic overview of these five stages.

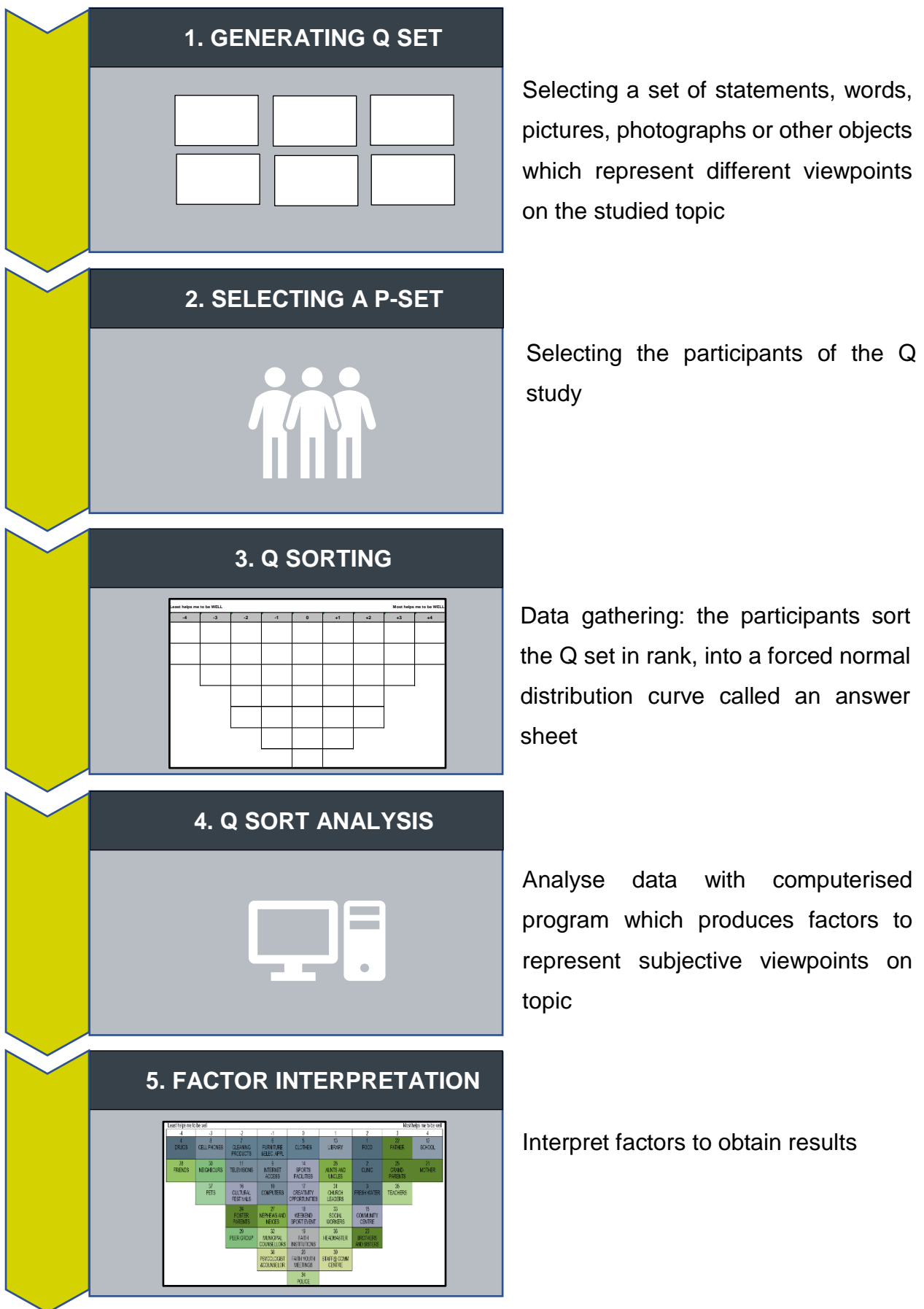


FIGURE 8: FIVE REQUIRED STAGES OF ALL Q STUDIES (NAUDE, 2016, PP. 401–402)

3.3. METHOD OF ENQUIRY

The method of enquiry for this study will be described by means of the five stages of a Q study, which are: 1) **generating a Q set**, 2) **selecting a P-set**, 3) **Q sorting**, 4) **Q sort analysis** and 5) **factor interpretation** (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 401–402). The details regarding this specific study's data gathering method, data analysis, data management and trustworthiness will all be incorporated into these five stages.

3.3.1. Stage 1: Generating a Q set

In this study, the Q set (set of cards with statements regarding environmental factors in Groendal) was generated by combining information gathered firstly, from literature and secondly, from a semi-structured group interview. The information gained through these two methods formed the *concourse*, which is a pool of statements too big to be used as a Q set. After this, sampling was done to reduce the number of items to the final Q set. This process for generating the Q set for this study will be described in this section and is illustrated in figure 9.

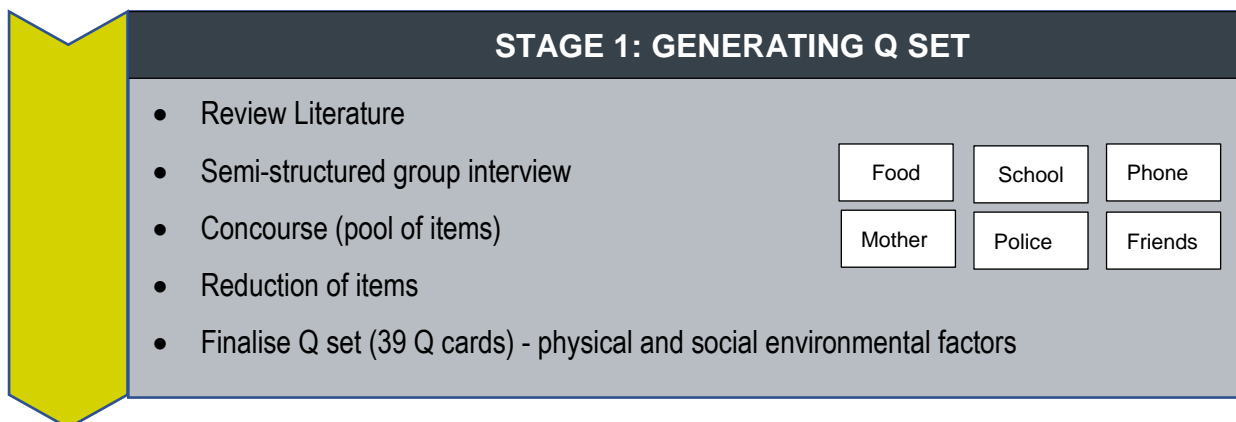


FIGURE 9: STAGE 1: PROCESS OF GENERATING Q SET

3.3.1.1. Stage1A: Review literature for concourse

In Q methodology, the Q set is selected from a broader pool of items called the **concourse** (Naude, 2016, p. 402). The concourse can be gathered in a number of ways, including group- or individual interviews with people who are familiar with the topic, reviewing literature or the researcher's own cultural experiences (Stenner *et al.*, 2007, p. 220; Naude, 2016, p. 402).

For this study, literature from the International Classification of Functioning, Disability and Health, Children and Youth Version (ICF-CY) was used as a guideline for dividing physical- and social environmental factors into sub-categories. This was done by critically reading through the full classification of the ICF-CY's environmental sub-categories for “**products and technology**” (World Health Organization, 2007, p. 191) and “**support and relationships**” (World Health Organization, 2007, p. 205) and then identifying the relevant environmental factors in terms of the Groendal context.

All the sub-categories that were specifically related to people with disabilities were then excluded (since this was not the focus of the study). Other sub-categories that were not relevant to adolescents between the ages of 13 and 17 years living in challenging socio-economic contexts were also excluded (e.g. Products and technology of land development). This process was done by the researcher and reviewed by supervisors and a Q methodology expert from the occupational therapy department of the University of Northampton, United Kingdom. (See *Appendix B* for definitions and descriptions of sub-categories that were used). Critical reasoning skills were used to select the sub-categories from the ICF-CY that were applicable to this specific study (see Table 6). The sub-categories that were selected were:

TABLE 6: ICF-CY SUBCATEGORIES USED IN THIS STUDY (WORLD HEALTH ORGANIZATION, 2007, PP. 191–199)

ICF-CY SUB-CATEGORIES	
Physical environment	Social environment
<ul style="list-style-type: none"> • Products for personal consumption • Products and technology for personal use in daily living • Products and technology for communication • Products and technology for education • Products and technology for culture, recreation and sport 	<ul style="list-style-type: none"> • Immediate family • Extended family • Friends • Acquaintances, peers, colleagues, neighbours and community members • People in positions of authority • People in subordinate positions • Strangers • Domesticated animals

<ul style="list-style-type: none"> • Products and technology for practice of religion or spirituality 	<ul style="list-style-type: none"> • Health professionals • Other professionals
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3.3.1.2. Stage1B: Semi-structured group interview for concourse

The second phase for gathering the concourse involved conducting a semi-structured group interview with a selected group of professionals and community members who know the Groendal community well. The semi-structured group interview took place on the 21st of August 2017. The individuals who were asked to join the interview included an educational psychologist who is involved in research in Groendal, the two social workers working in the Groendal community, two members from the Franschhoek Youth Forum, the life orientation teacher from the local secondary school and two adolescents living in Groendal. The educational psychologist and one of the members of the youth forum were unable to attend the interview, hence there were six participants. The participants for the semi-structured interview were selected by purposive sampling. The participants were given the opportunity to give informed consent before they participated, by reading through an information letter and signing a consent form that was emailed to them two weeks prior to the group interview (see *Appendices G and J*).

The researcher facilitated the semi-structured group interview at Groendal's community centre. Two audio recorders were used (one electrically operated, and one battery operated), to rule out the risk of a malfunction. Each participant filled in a basic demographical questionnaire before the interview started (see *Appendix A*). Each participant also received a page with the ICF-CY definitions that were used as a guide in the interview (see *Appendix B*). The semi-structured group interview was conducted in English.

The researcher explained to the participants that the aim of the semi-structured group interview was to list the different physical- and social environmental factors that were available to adolescents in Groendal. The geographical boundaries that were implied when referring to Groendal were explained and the researcher read the names and definitions of the sub-categories of the ICF-CY to the participants (see *Appendix B*). Thereafter, the researcher facilitated the semi-structured interview by going through each of the sub-categories and allowing the participants to elaborate on which

specific environmental resources were available to adolescents in Groendal under each category. After all the sub-categories were discussed, the researcher concluded the semi-structured group interview by asking a summarising question: “have we missed anything?” (Greeff, 2011, p. 372). The duration of the semi-structured group interview was approximately one and a half hours. Afterwards, the researcher transcribed the content of the interview from the audio recording.

3.3.1.3. Stage1C: Reduction phase

After the concourse was collected through literature and the semi-structured group interview with a selected group of professionals and community members in Groendal, there were too many environmental factors listed to form an appropriate Q set. The semi-structured group interview produced in-depth information regarding the specific environmental resources that were available in the community of Groendal. These included, for example, the names of the different grocery stores in Groendal, the specific services provided by the schools (including food distribution, after school care, computer access and sport facilities), the services provided by the local clinic (including access to medical doctors, physiotherapy, psychologists, support groups and soup kitchens) and many other detailed resources. The concourse then needed to be reduced into a manageable number of Q cards to do Q sorting with. The concourse was reduced to a representative sample of statements by means of critical reasoning, referring to literature and by receiving input from a senior lecturer at the Occupational Therapy Department of the University of Northampton, United Kingdom (an expert in Q studies within occupational therapy). The input from the expert in Q methodology reduced researcher bias. After the researcher and the expert in the research method agreed on the most appropriate set of items, the **Q set** was finalised. This process in Q methodology is referred to as ‘sampling’ in literature (Watts and Stenner, 2012, p. 61; Naude, 2016, p. 402).

3.3.1.4. Stage1D: Final Q set

All the relevant sub-categories of the ICF-CY’s physical- and social environment were adequately represented in the final Q set. The Q set consisted of 39 single words or short statements. Twenty of the statements were from the ICF-CY’s physical environment and 19 under the social environment. Thirty-nine Q cards were chosen, to ensure that the Q sorting procedure did not take longer than 30 minutes, to

accommodate the participants' concentration spans and energy levels. Each word or statement represented an environmental factor present in Groendal. After the Q set was established, each statement was printed onto a separate flash-card. Each Q card was numbered on the back. The final Q set of 39 Q cards is illustrated in figure 10. The Q set was divided into the ICF-CY sub-categories to illustrate the number of cards in each sub-category.

After the Q set was formed, the next stage in the data gathering procedure was to select participants to engage in the Q sorting process.

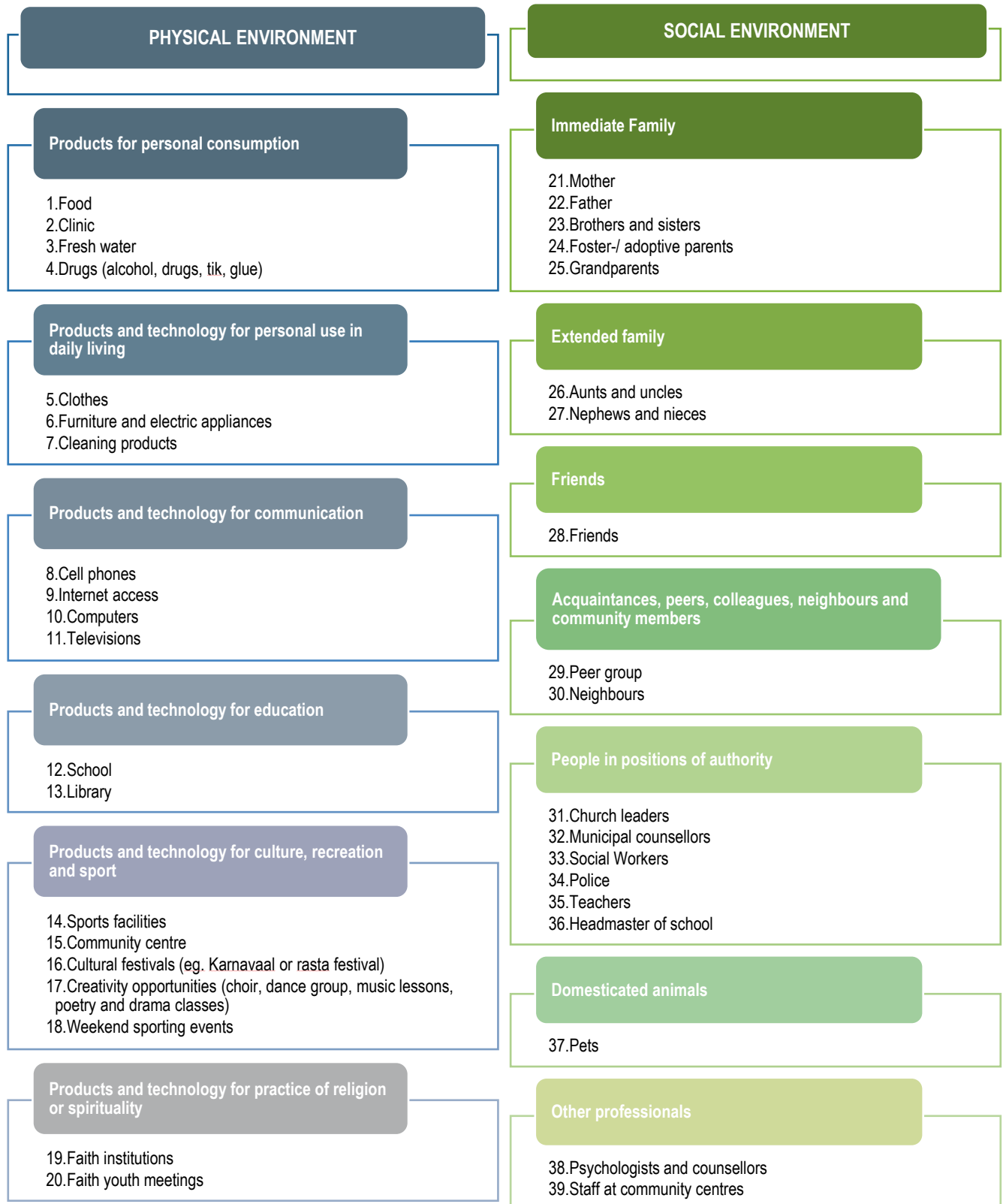


FIGURE 10: FINAL Q SET FOR THIS STUDY

3.3.2. Stage 2: Selecting a P-set

The next phase in a Q study is to select the participant group, referred to as the P-set. The process of identifying the P-set for this study will be described in this section. Figure 11 illustrates the main points that will be discussed in this section.

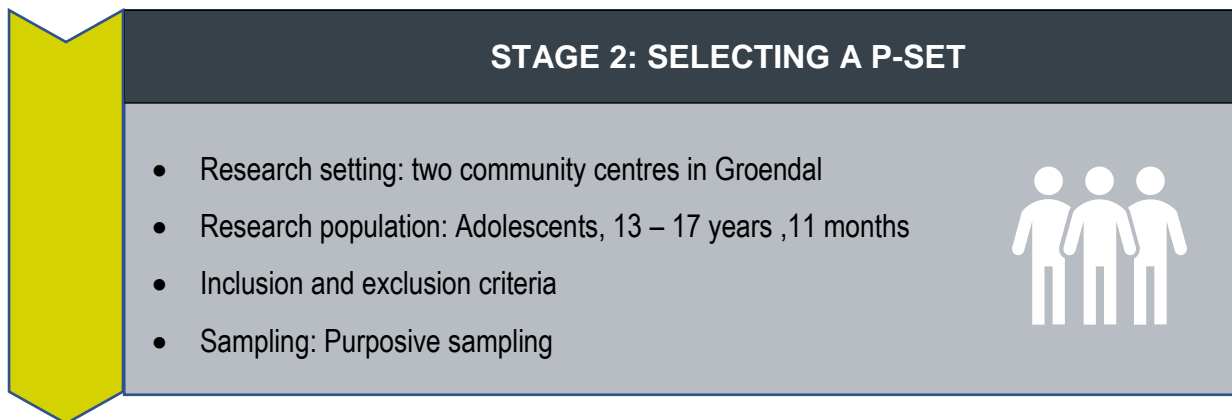


FIGURE 11: STAGE 2: SELECTING A P-SET

3.3.2.1. Stage2A: Research setting

Adolescents from two community centres in Groendal participated in the study. Both centres provided services to a variety of age groups within the community (including adolescents). Most of the adolescents who visited the centres were Afrikaans speaking and coloured. There were also Xhosa and Sesotho speaking, black adolescents who came to the centres. Most of the adolescents who utilised the services of the centres resided in the Groendal, Langrug and Mooiwater neighbourhoods as well as the surrounding farms in the area (Jeftas, 2017; Ravell, 2017). Both centres were situated in Groendal and were easily accessible and well known by all the residents.

The first community centre offered supporting services to a variety of community members in Groendal (from preschool children to the elderly) and was run by the Lord's Acre community church. Adolescents who attended this community service had access to a soup kitchen twice a week, after care services for help with homework, a community choir and a school holiday program. Approximately 50 adolescents from the Groendal community regularly attended the services offered by the community centre, especially after school hours (Jeftas, 2017).

The second community centre offered services specifically to children and youth in the Groendal community. They presented life skills groups as well as a variety of sports opportunities to adolescents and children. They also ran a holiday program every school holiday. Furthermore, they had after care facilities where adolescents could use computers and other resources for school purposes. Approximately 130 adolescents attended the services at the second community centre (Ravell, 2017).

The adolescents who utilised the community centres' services were chosen as participants for this study because these centres were a meeting place for a variety of adolescents from different backgrounds (school-going, non-school going, impoverished, middle class etc.). Furthermore, since the aim of the study was to describe environmental factors that *enabled* occupational well-being, the participants needed to be individuals who made use of the resources that the community had to offer, with the community centres the most prominent.

3.3.2.2. Stage2B: Research population

The population group for this study was adolescents between the ages of 13 and 17 years 11 months, who attended the services at Groendal's two community centres and who lived in the Groendal neighbourhood at the time of the data collection. The following areas were included when referring to the Groendal neighbourhood: Groendal, Langrug and Mooiwater. This was done to ensure that the environmental factors that were identified could be limited to a certain geographical area and to ensure that all the participants in the study had access to them. The map in figure 12 indicates the areas that were included in the study (Google Maps, 2017).

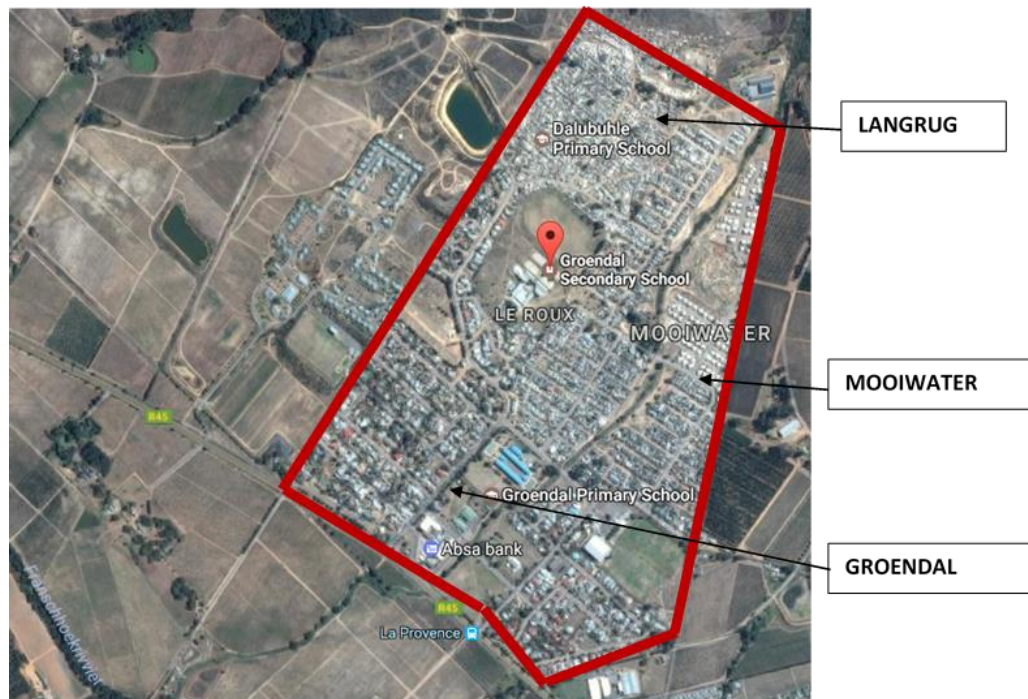


FIGURE 12: MAP OF GROENDAL COMMUNITY (ADAPTED FROM GOOGLE MAPS, 2017)

3.3.2.3. Stage2C: Inclusion and exclusion criteria

The following individuals were included in the study:

- Adolescents between the ages of 13 years and 17 years and 11 months. This age group was selected because children younger than 13 would not necessarily have the required depth of insight into their own occupational well-being. Individuals older than 18 are not classified as children by the South African child care act, and therefore are in a different life phase with more autonomy than others who are younger than 18. This could cause their occupational well-being to be impacted by a different set of environmental factors than 13-17 year olds.
- Both male and female individuals
- Individuals from all racial groups
- Individuals who were able to speak and understand Afrikaans or English. The possibility of misinterpretation of instructions and of participants' answers to open-ended questions motivated this choice. However, it was not necessary to exclude any participants from the actual study based on this criterion, since all the prospective participants understood Afrikaans or English.

- Individuals whose residential addresses were situated in the indicated neighbourhoods. This ensured that all the participants had access to similar environmental factors.

The following individuals were excluded from the study

- Individuals who lived in other residential communities.
- Individuals with severe intellectual impairments that would impede their participation in the study, since this would prevent them from understanding the somewhat complex Q sort process and from answering the open-ended questions with the necessary insight.
- Individuals who were visibly under the influence of any form of substance. This could also hinder them from participating in the Q sorting process with understanding.

3.3.2.4. Stage2D: Sampling method

In Q methodology, the researcher does not aim to draw conclusions regarding the larger representative group, and therefore is less concerned with participant sampling techniques (Brown, 2004, p. 4). The goal of participant sampling is to have a P-set (participant group) that is representative of the group in terms of different opinions and subjective experiences (Stenner *et al.*, 2007, p. 221; Naude, 2016, p. 404).

Purposive sampling was used to select the participants for the study. This sampling technique is based on the judgement of the researcher, and allows the researcher to construct eligibility criteria that would serve the purpose of the study (Strydom, 2011b, p. 232; Naude, 2016, p. 404). According to Q methodology literature, small sample sizes are appropriate for Q studies, since the methodology is primarily inductive and exploratory rather than deductive or predictive (Stenner *et al.*, 2007, p. 222; Watts and Stenner, 2012, p. 72; Ramlo, 2016, p. 31; Yang, 2016, p. 45). In other words, Q methodology focusses on determining specific viewpoints and then understanding and comparing them, which can be achieved with a very small P-set size, and even a single individual. This is the case, because in Q methodology participants are the variables. Watts and Stenner suggested that a good guideline for an appropriate P-set size would be one that was smaller than the amount of statements in the Q set (Watts and Stenner, 2012, p. 72).

Consent and assent forms were handed out by the researcher to 114 adolescents at the two community centres. The researcher was assisted by the staff at the community centres to approach possible participants. The participants were verbally informed of what the study entailed, and they were given the opportunity to ask any questions. They were then informed that the researcher would be at the centre the following day if they wished to return the signed forms. A final number of 33 participants fitted the eligibility criteria and returned consent and assent forms. Hence the final sample size (P-set) for this study was **33 participants** from the two community centres in the Groendal community.

After the P-set was finalised, the next phase of the study started, namely Q sorting. (see Chapter 4, *Results*, for a full description of the final Q set).

3.3.3. Stage 3: Q sorting (Data gathering)

The method by which data is gathered in Q methodology is the **Q sort** technique (Stenner *et al.*, 2007, p. 215; Naude, 2016, p. 405). This technique involves the participants sorting a collection of items (Q set) in rank, into a forced normal distribution curve called an answer sheet (Stenner *et al.*, 2007, p. 216). The process of gathering data through Q sorting is summarised in figure 13. After discussing the Q sorting process, details about the pilot study and data management procedures will be described.

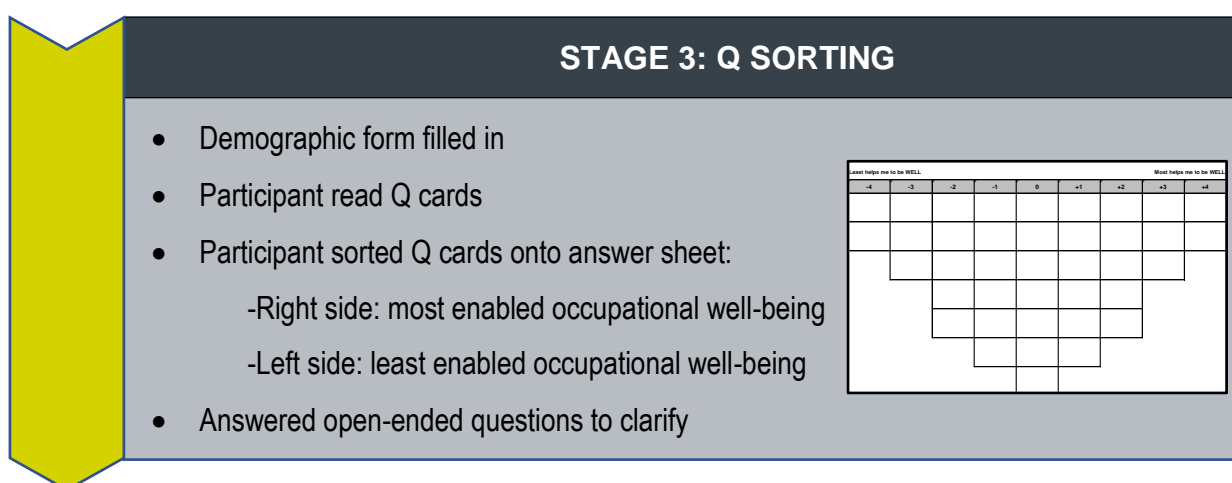


FIGURE 13: STAGE 3: DATA GATHERING PROCEDURES (Q SORTING)

3.3.3.1. Stage3A: Background to Q sorting procedures

The data was gathered in the form of **Q sorting**, from October 2017 until January 2018. The researcher spent 90 hours in total at the two community centres. This included time informing possible participants about the study, handing out consent and assent forms, waiting for potential participants to return their forms and doing actual Q sorting. This was done at the different services provided by the two centres, including the holiday programs, soup kitchen, sport practices, etc.

Every interview took approximately 30 minutes to complete. Interviews were held in private areas at the centres. However, the programs of the community centres were flexible and unpredictable, which sometimes led to unexpected changes in venues. The language of communication for the interviews was either Afrikaans or English, depending on the participants' preferences. The open-ended questions were recorded with a voice recorder and field notes were made of any non-verbal cues picked up. All the audio recordings were fully transcribed.

3.3.3.2. Stage3B: The procedures for executing the Q sorting method

The following method was used to gather the data with each individual participant at the community centres:

1. The numbered Q set was shuffled and packed out on a table as well as an A1 sized, laminated answer sheet (*see Appendix E*) (Brown, 2004, p. 4). An A4 paper with demographical questions was also placed on the table with an answer sheet printed on its back (*see Appendix C*).
2. The participant came into the private room and sat next to the researcher at the table, facing the Q set, A1 sized answer sheet and demographical question sheet.
3. The researcher introduced herself to the participant and reminded the participant that he/she signed an assent form to participate in this study, but that he/she could at any time discontinue participation.
4. The researcher then asked the participant to fill in the demographical form. The number on the participant's consent and assent forms were copied onto the demographical form. The researcher assisted the participant if they did not understand the questions.

5. The researcher then explained to the participant that the purpose of the study was to determine which things in their environment in Groendal helped them to be well (see *Appendix D, nr1 for definition of “being well”*)
6. The researcher then explained the Q sorting process to the participant by reading from the condition of instruction page on the table (see *Appendix D*). In summary, the researcher instructed the participant to read the 39 cards of the Q set out loud and to ask any questions they wanted to. After reading through the Q set together, the researcher instructed the participant to choose the two cards from the Q set they felt helped them the most to “be well”. These two cards were packed under +4 on the answer sheet. Thereafter the participant was instructed to choose the two cards that help them the least to “be well” and to pack them under -4 on the answer sheet. Thereafter, the participant was directed to +3, -3 +2, -2, +1 and -1, respectively and each time the participant was asked to select Q cards and to pack them under the specific number on the answer sheet in correlation with how much that card enabled them to “be well”. The participant was informed that they could rearrange the Q sort at any time during the Q sorting process, if they wanted to. (See *figure 14 for an example of a completed Q sort.*)

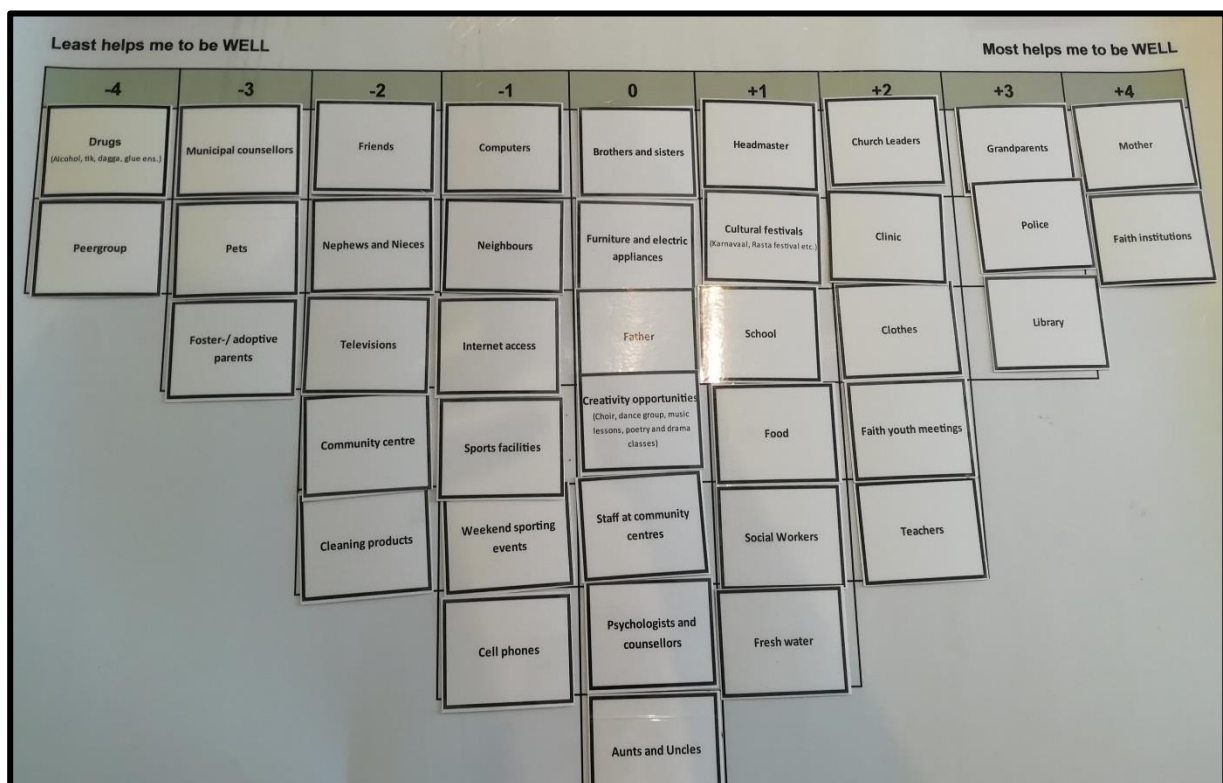


FIGURE 14: EXAMPLE OF A COMPLETED Q SORT

7. After the researcher explained the Q sorting process to the participant and allowed the participant to place all the Q cards on the A1 sized answer sheet, the researcher gave the participant the opportunity to review their completed Q sort and to rearrange it if they felt the need.
8. The researcher then asked the participant the following two open-ended question to the participant: 1) "*would you please explain to me why you have packed the cards in this order?*" (if the participant needed more guidance, the researcher specifically asked the participant to elaborate on why they placed the specific cards at +4 and at +3, and then went to -4 and -3 and asked the same question) and 2) "*Are there any other things in your environment that help you to be well that was not in the list of cards?*". These questions were recorded with a voice recorder.
9. The researcher thanked the participant for participating in the study and said goodbye to the participant.
10. After the participant had left, the researcher documented the participant's Q sort response on the A4 sized answer sheet on the back of the demographical information sheet. This was done by writing each of the numbers of the Q set in the correct block, in accordance with the participant's response. Field notes were also made regarding the participant's answers to the two open-ended questions

Before the study was conducted with the participants, a pilot study was done

3.3.3.3. Stage3C: Pilot study

The goal of a pilot study is to determine whether the needed information can be gathered from the participants for the purposes of the study through the specific methodology. Furthermore, it can be used to determine whether or not the estimated time per interview was adequate and if the instructions are understandable to participants (Strydom and Delpont., 2011, p. 395).

A pilot study was done with two participants from the community, in the same age group as the participants of the study (one was 15 years and the other was 17 years old). This was done to see if the participants understood the instructions and if there were any changes needed to the methodology. It was also used to determine if the Q set was appropriate and adequately represented the enabling environmental factors that were available to adolescents in Groendal. Furthermore, the pilot study

was used to determine how long the Q sorting process would take and if the time needed to complete the Q sort was too long for an adolescent's concentration span and energy levels.

The pilot study was done after the Q set had been finalised through literature and a semi-structured group interview with a selected group of professionals and community members who know the Groendal community well. It took place on the 18th of September 2017.

Through the pilot study, it became clear that the time needed per Q sort would be approximately 30 minutes. The adolescents who participated in the pilot study, understood the instructions for the Q sorting process when delivered verbally, but they were unable to read the instructions with comprehension from the 'condition of instruction' paper that was available to them (*see Appendix D*). Furthermore, it was also observed that the participants needed more guidance in the answering of the open-ended question. Rather than only asking: "why did you pack the cards the way that you did?", they were also asked to specifically elaborate on the cards they placed at +4 and +3 and at -4 and -3. This gave more in-depth data.

Since no changes were made to the methodology after the pilot study, the data gathered was included in the study.

3.3.3.4. Stage3D: Data management

The names of participants did not appear on any electronic or hard copies of the data, since they were allocated with numbers for de-identification purposes.

During the data gathering phase, the transcribed interviews, audio recordings and photos of Q sorts were saved on the researcher's computer that was protected with a password. The information was also stored on an external hard drive, in case of loss of information, and the hard drive was safely stored in the researcher's house. The hard copies of the consent forms, assent forms and demographic information and answer sheets were safely stored in a file in the researcher's house.

The data that was gathered through this research will be stored at the Occupational Therapy Department of the University of the Free State for 15 years, for ethical purposes.

3.3.4. Stage 4: Q Sort Analysis

The analysis of the data for this study took place in two phases. Firstly, the data from the Q sorts was analysed with the help of a computerised program. Thereafter, the data from the open-ended questions were coded and themes were identified. These two phases will be explained in the following section and is illustrated in figure 15.

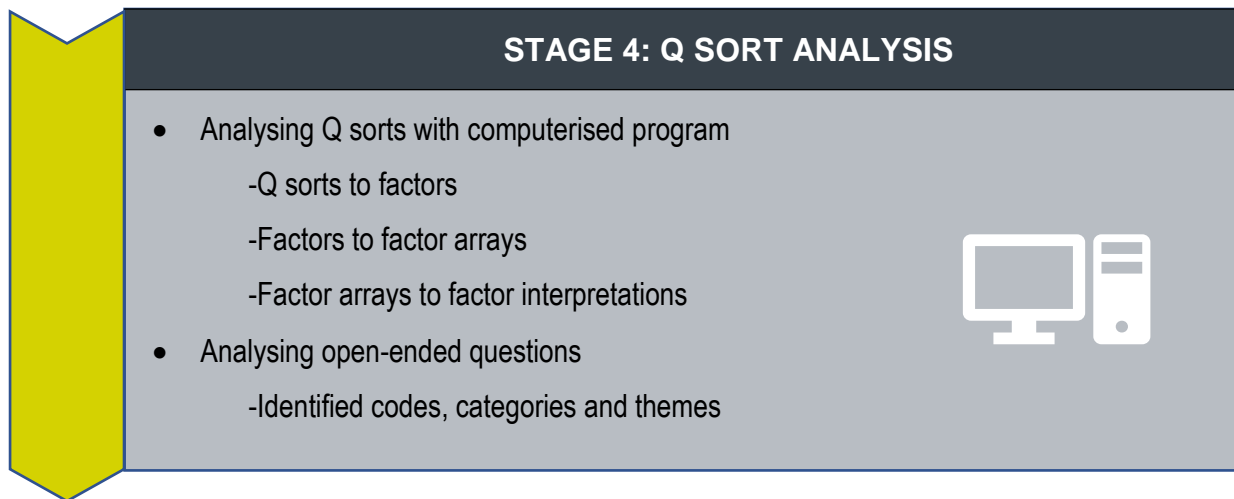


FIGURE 15: STAGE 4: Q SORT ANALYSIS PROCEDURES

3.3.4.1. Stage4A: Analysing Q sorts

In Q methodology by-person correlations and factor analytical procedures are done to analyse data. Hence, in Q methodology the participants themselves are the variants that are compared to each other, rather than the items in the Q set (Watts and Stenner, 2005, p. 81-82, 2012, p. 3). The data analysis of Q sorts has to go through three transitional phases, namely: the transition from Q sorts to factors, and then from factors to factor arrays and lastly, from factor arrays to factor interpretations (see figure 16) (Watts and Stenner, 2012, p. 180).

These procedures were conducted by reading the completed Q sorts into an electronic statistical programme, specifically tailored to Q methodology's requirements, called PQ Method (Watts and Stenner, 2005, p. 80, 2012, p. 94). This program was specifically recommended by Stenner and Watts, and was downloaded, for free from the internet at the following website: <http://schmolck.userweb.mwn.de/qmethod/#PQMethod>. The program did the

complete analysis of the data and then produced an in-depth report that the researcher interpreted to make sense of the data.

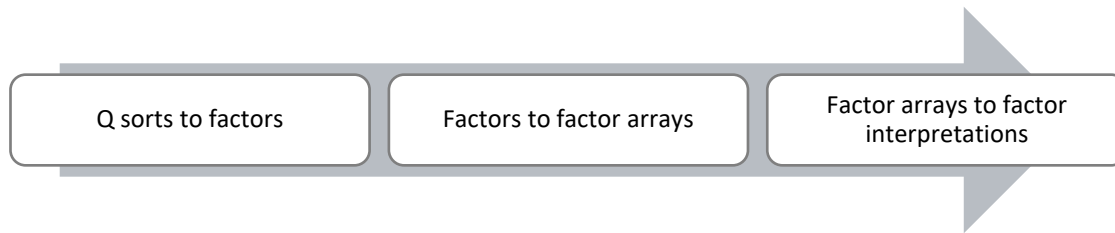


FIGURE 16: Q SORT ANALYSIS PROCESS

Firstly, the completed **Q sorts changed into factors**. Each complete Q sort was compared to every other Q sort, creating a by-person correlation matrix between complete Q sorts (Watts and Stenner, 2012, p. 97). The program then identified Q sorts that, based on their correlations, appeared to go together as a group or type. These groups are referred to as “factors” in Q methodology (Stenner *et al.*, 2007, p. 224; Watts and Stenner, 2012, p. 98; Naude, 2016, p. 409). Each factor represents a number of Q sorts that have been sorted in a similar way, and hence represents a certain viewpoint held by a group of participants. (Stenner *et al.*, 2007, p. 219; Naude, 2016, pp. 409–411).

Secondly, the **factors were changed into factor arrays**. The program rotated the factors, using automated varimax rotation, which mathematically identified the clusters of Q sorts that were packed in a similar way (Watts and Stenner, 2005, p. 82, 2012, p. 126). Every factor was presented on a separate answer sheet (called a *factor array*), that showed exactly how the Q cards for this specific factor were placed on an answer sheet. Factor arrays are calculated through weighted averaging, i.e. Q sorts with higher loadings are given more weight in the averaging process, since they represent the factor better (Stenner *et al.*, 2007, p. 226; Watts and Stenner, 2012, pp. 140–141).

Thirdly, these **factor arrays were interpreted** to understand the different subjective viewpoints held by participants of this study about environmental enablers to their occupational well-being. The interpretation of the factors is described in more detail in the following section.

3.3.4.2. Stage4B: Analysing data from open-ended questions

The analysis process for the data from the open-ended questions is illustrated in figure 17.

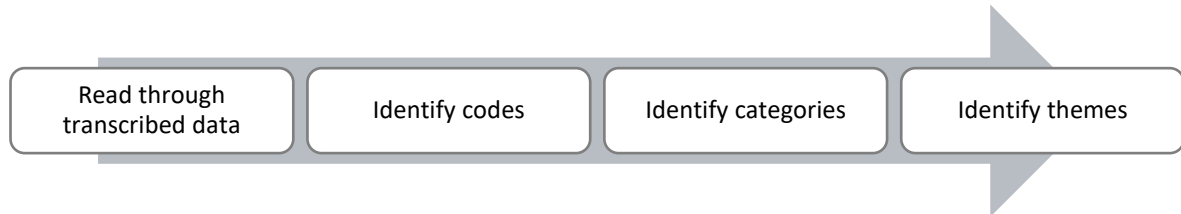


FIGURE 17: DATA ANALYSIS OF OPEN-ENDED QUESTIONS

The open-ended questions at the end of the Q sort were recorded on an audio recorder. Field notes were also made directly after each interview to capture the non-verbal and verbal impressions that were observed. At the end of every day's data gathering, the day's interviews were transcribed. At the end of the data gathering phase, the researcher read through the transcribed data numerous times to familiarise herself with the data. Thereafter, the process of coding started. Coding refers to the process of identifying and labelling categories and topics from the raw data (Schurink, Fouchè and De Vos, 2011, p. 411). During coding, patterns are identified and labelled through the use of phrases, colours, numbers or words (Schurink *et al.*, 2011, p. 411).

The coding process started by sorting the open-ended questions' answers under each of the two questions that were asked. After completing this, a document was generated with two headings (the two open-ended questions) and all the raw transcribed data categorised under these two questions. Thereafter, the data under each question was labelled. Labelling refers to the process of studying each sentence or response and giving it a name, which describes the essence thereof. All of these labels were then compared to see which groups arose from the different labels (Schurink *et al.*, 2011, p. 411). After labelling the data, **codes** were identified. In the coding process, the terms from the Q set were used, which helped to link the data from the open-ended questions to the data from the Q sorts. After coding the data, the codes that seemed to have similar themes were grouped together (Schurink *et al.*, 2011, p. 411) and then each group was given a name which described that **category** (Schurink *et al.*, 2011, p. 412). After this, the categories were studied again and then overarching **themes** were identified.

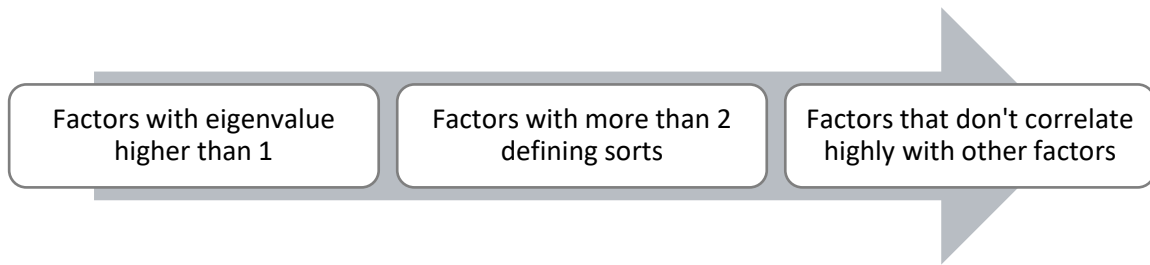


FIGURE 19: PROCESS FOR IDENTIFYING SIGNIFICANT FACTORS

As seen in figure 19 the first step was to choose the factors with an **eigenvalue of higher than 1** (Watts and Stenner, 2005, p. 81, 2012, p. 105). The eigenvalue of the factors reflects the variance extracted from each factor and is calculated by multiplying the variance with the number of participants, and then dividing it by 100 (Coogan and Herrington, 2011, p. 26; Watts and Stenner, 2012, p. 105). The second step was to look at the number of **defining sorts** (specific Q sorts that correlated significantly with a certain factor, thereby defining the factor). Only the factors with at least two defining sorts were selected (Watts and Stenner, 2005, p. 81, 2012, p. 107). Thirdly, the **correlations between factors** were examined. If any of the factors correlated strongly with each other, it meant that they were representing the same subjective viewpoint, with only a few minor differences, hence they did not need to be discussed separately (Watts and Stenner, 2005, p. 82, 2012, p. 141). After this process, it became clear that there were two factors (subjective viewpoints) that had to be interpreted and explored (cf.4.3.1). These two factors were each translated onto a separate answer sheet which represented the way in which participants for that factor placed the Q set on the answer sheet (see image of coloured answer sheet in figure 18 for an example of a factor array portrayed on an answer sheet). These answer sheets representing a factor are referred to as factor arrays. See Chapter 4 (cf. 4.3.2.2 and 4.3.3.2) for the factor arrays of the two identified factors.

After these two factors were identified, the factor arrays for these two factors were studied and interpreted in order to gain an understanding of the different subjective viewpoints that emerged from the data (Stenner *et al.*, 2007, p. 219). The interpretation of factor arrays is a thoughtful and holistic process of inspecting patterns within each factor array. The factor arrays are the basis and most significant part of the interpretation of the factors (Watts and Stenner, 2012, p. 181). The main aim of factor interpretation is to discover the subjective viewpoints captured by

participants. This is an abductive process, where the researcher does not go into the interpretation with a pre-conceived hypothesis or idea about the outcome, but rather allows the factor arrays to speak for themselves (Watts and Stenner, 2012, p. 40). The interpretation of the factor arrays for this study was done to draw conclusions regarding which viewpoints were most prominent among the group of participants concerning the environmental factors which enabled occupational well-being and which ones did not. This will be described and discussed in more detail in Chapters 4 and 5.

After the factors were interpreted, the themes that were identified from the open-ended questions were used to gain a deeper understanding of the subjective viewpoints of the adolescents (Stenner *et al.*, 2007, p. 223; Watts and Stenner, 2012, p. 105).

3.4. TRUSTWORTHINESS

The trustworthiness of this study was positively influenced by using Q methodology. In this section the way in which trustworthiness was ensured in this study will be described.

3.4.1. Credibility

The credibility of the data that was gathered was ensured through peer review by supervisors, as well as an expert in the field of Q methodology from the University of Northampton, United Kingdom. (Schurink *et al.*, 2011, p. 419; Naude, 2016, p. 412). Credibility was further ensured by allowing the participants to rearrange the Q sort at any time during the Q sorting process, giving the participants the opportunity to ensure that their subjective viewpoints were adequately portrayed by the Q sort (Naude, 2016, p. 413).

3.4.2. Triangulation

Data triangulation was used to improve the rigor of the study (Schurink *et al.*, 2011, p. 420), by using different sources (from various people, at different times) to gather data for the concourse and the sampling of the final Q set (Naude, 2016, p. 412). This ensured that the concourse was representative of elements found in literature, but that the reality of the specific population group was also considered.

3.4.3. Transferability

Transferability of the findings of this study was not a high priority, since the findings were not used to generate generalised assumptions about similar populations, but rather to gain a better understanding of the specific population's experiences (Schurink *et al.*, 2011, p. 420). It can however be said that transferability will depend on the reader, with regards to possibilities for further research regarding this topic or for inferring similarities in relation to other communities.

3.4.4 Dependability

The dependability of the data gathering process was increased significantly using Q methodology. Using the computerised data analysis process, ensured that the data was extracted accurately and minimised the opportunity for human error. This added to the logicity and effective documentation of the data gathering (Schurink *et al.*, 2011, p. 420). Furthermore, the Q method itself leans toward careful audit of data which contributed to the dependability of the study. The open-ended questions were transcribed word for word to ensure that the researcher's own interpretations of the data did not influence the raw data (Naude, 2016, p. 413).

3.4.5. Confirmability

Confirmability was also optimised in this study through the use of Q methodology, since the factors were not identified based on the researcher's own interpretation of the gathered data, but relied on the computerised data analysis process to extract factors from the Q sorts. (Schurink *et al.*, 2011, p. 421).

The method of enquiry through means of Q methodology was explained in detail in the previous section. Throughout this process, various ethical considerations had to be taken into account. In the next section those ethical considerations that were considered will be discussed.

3.5. ETHICAL CONSIDERATIONS

Research in the social sciences has unique challenges that are not present in the clinical and controlled environment of the natural sciences. When working with people as participants, gaining new knowledge can never come at the expense of human beings. Doing research with humans should, consequently, be approached with

tremendous sensitivity and scrutiny of one's own motivations, prejudices and blind-spots (Strydom, 2011a, p. 113). In this following section, the ethical considerations that were considered throughout this research process, will be discussed in terms of autonomy, beneficence, confidentiality, justice and non-maleficence.

The protocol for the research study was submitted to and reviewed by the Health Science Research Ethics Committee (HSREC) of the University of the Free State. The protocol was approved by the HSREC, before any data gathering took place. The HSREC number provided as proof of this study's ethical approval was: HSREC 89/2017 (UFS-HSD2017/0894).

3.5.1. Autonomy

Autonomy refers to a person's right to be self-governed or to make their own decisions (Moodley, 2011, pp. 3–6). Voluntary participation in research is essential to the ethical soundness of a study (Strydom, 2011a, p. 116). The participants of this study were treated with respect with regards to their individual autonomy, freedom of choice and dignity. Firstly, the heads of the community centres could decide if they were comfortable with the aim and methodology of the research and were asked to give informed consent for the study to be conducted at their centres (*see Appendices F and I*). Secondly, the participants of the study were younger than 18 years and were therefore given the opportunity to give informed assent (*see Appendix L*), while their guardians or parents were asked for informed consent (*see Appendix H and K*). All participants were informed that participation was completely voluntary and that they were welcome to withdraw from the study at any stage (Strydom, 2011a, pp. 116–117). The staff at the community centres where the research was conducted, helped to explain the study to the participants and to answer their questions. Since the adolescents knew the staff well and trusted them, they felt safe to ask their questions. Participants will be given a copy of research findings (written in laymen's terms) on request. Furthermore, staff and participants will be invited to a feedback session regarding the findings of this study that will be verbally presented at the two community centres.

3.5.2. Beneficence

Beneficence is doing or acting for the benefit of others (Moodley, 2011, pp. 3–6). The aim of this research was to eventually benefit others, through disclosure of all study details to the participants and staff at community centres, in order to give them access to the knowledge that was generated about the enablers to occupational well-being of adolescents in Groendal. At all times, it was aimed to maximise the benefits and reduce the risks of the study towards participants and community members. An information session would be scheduled after the results of the study had been processed. The participants of the study, staff from the community centres, municipality members and other role players in the community would be invited to attend the information session.

3.5.3. Confidentiality and de-identification

Confidentiality refers to keeping information safe that is not intended to be seen by others (Moodley, 2011, pp. 3–6; Strydom, 2011a, p. 119). Confidentiality was obtained through de-identification of participants of the semi-structured group interview as well as the Q sorting. A numbering system was used to de-identify participants after they signed assent and consent forms. The names of participants were also edited out of the transcribed open-ended questions. All information on electronic devices was safely kept in the possession of the researcher by means of passwords. An additional copy of the data will be securely stored as intellectual property of the University of the Free State for the prescribed 15 years.

3.5.4. Justice and Fairness

To ensure justice and fairness, one needs to ensure equity, objectivity and lack of bias and prejudice (Moodley, 2011, pp. 3–6). In research with marginalised communities, a researcher has to be especially wary of contributing to marginalisation through approaching the community from a position of 'power', rather than from cultural humility (Strydom, 2011a, p. 114). Throughout the process of the study, the researcher was aware of this matter and continually evaluated whether she was still approaching the participants from a position of cultural humility, by partnering with them and learning from their lived occupational experiences. This is one of the reasons why Q methodology was deemed an appropriate study design for this study, since it provided a way of understanding the adolescents' *subjective* experiences

about their community. Every effort was made to ensure that all participants of the study were treated equally, by giving all participants who qualified according to the eligibility criteria, equal opportunity to engage in the study. Fairness was ensured by not giving any remuneration for participation in the study, which could be interpreted as a bribe or could possibly motivate participants to take part in the study against their will, but solely for material gain (Strydom, 2011a, p. 121).

3.5.5. Non-maleficence

Non-maleficence refers to not inflicting harm or to inflicting the minimum amount of possible harm to reach a beneficial outcome (Moodley, 2011, pp. 3–6). The participants of this study were not exposed to any harmful circumstances through participation in the study. The specific focus of the study, exploring enablers to well-being, rather than disablers, contributed to the non-maleficence of the study, by preventing possibly traumatising participants by focussing on the stressors in their environments. Non-maleficence was further ensured, through de-identification of participants. This ensured that any confidential information they shared during the interviews, could not be leaked or used against them in any way. All potential participants received the needed information regarding the study, to ensure that they knew exactly what they were agreeing to.

After the ethical considerations that were made regarding this study has been discussed, Chapter 3 can be concluded. The next section will conclude this chapter.

3.6. CONCLUSION

Q methodology proved to be a rigorous and pragmatic study design and provided an effective way of answering the research question. The simplicity of the methodology and the space it created for subjectivity, while still providing systematic numerical data contributed to its rigour as a research method. In this chapter the reason for using Q methodology as the best avenue through which to answer the research question was described. A brief overview of Q methodology as a mixed method study design was given. Furthermore, the method of enquiry for this specific study as well as the ethical considerations that were made throughout the research process were also explained. In the next chapter, Chapter 4, the results of this Q study will be presented.

CHAPTER 4

Results

4.1. INTRODUCTION

In the previous chapter, the methodology that was used to determine which environmental factors enabled occupational well-being for adolescents in the Groendal community was discussed. Mixed methodology and more specifically Q methodology were introduced and explained. In this chapter, Chapter 4, the results of the study will be presented, by looking at the demographics of the participant group, the factor arrays of the two identified factors from the Q sorts and by presenting the themes that arose from the open-ended questions. It should be noted that the results of the study will only be *presented* in this chapter. In the following chapter, Chapter 5, the results will be *discussed* through means of data triangulation.

4.2. DESCRIPTION OF PARTICIPANTS

As seen in figure 20, of the 114 adolescents who received assent and consent forms, a total number of 33 participants fitted the eligibility criteria and returned consent and assent forms. Hence the final sample size (P-set) for this study was **33 participants** from the two community centres in the Groendal community. Twenty (20) of these participants were from the first community centre and the remaining 13 were from the second community centre. The genders of the participants were 15 males and 18 females. The ages of the participants ranged from 13 years to 17 years and 11 months (on the day of the Q sorting), with the majority (11 participants) being 13 years old. The home languages of participants were Afrikaans (18 participants), isiXhosa (10 participants), Sesotho (three participants), English and Setswana (one participant each). All the participants were school going, ranging from Grade 5 to Grade 12, with most of the participants being in Grade 8 (eight participants). The participants' duration of residency in Groendal ranged from one year to 17 years, with 11 participants residing in each of the three neighbourhoods that formed part of this study (Groendal, Langrug and Mooiwater).

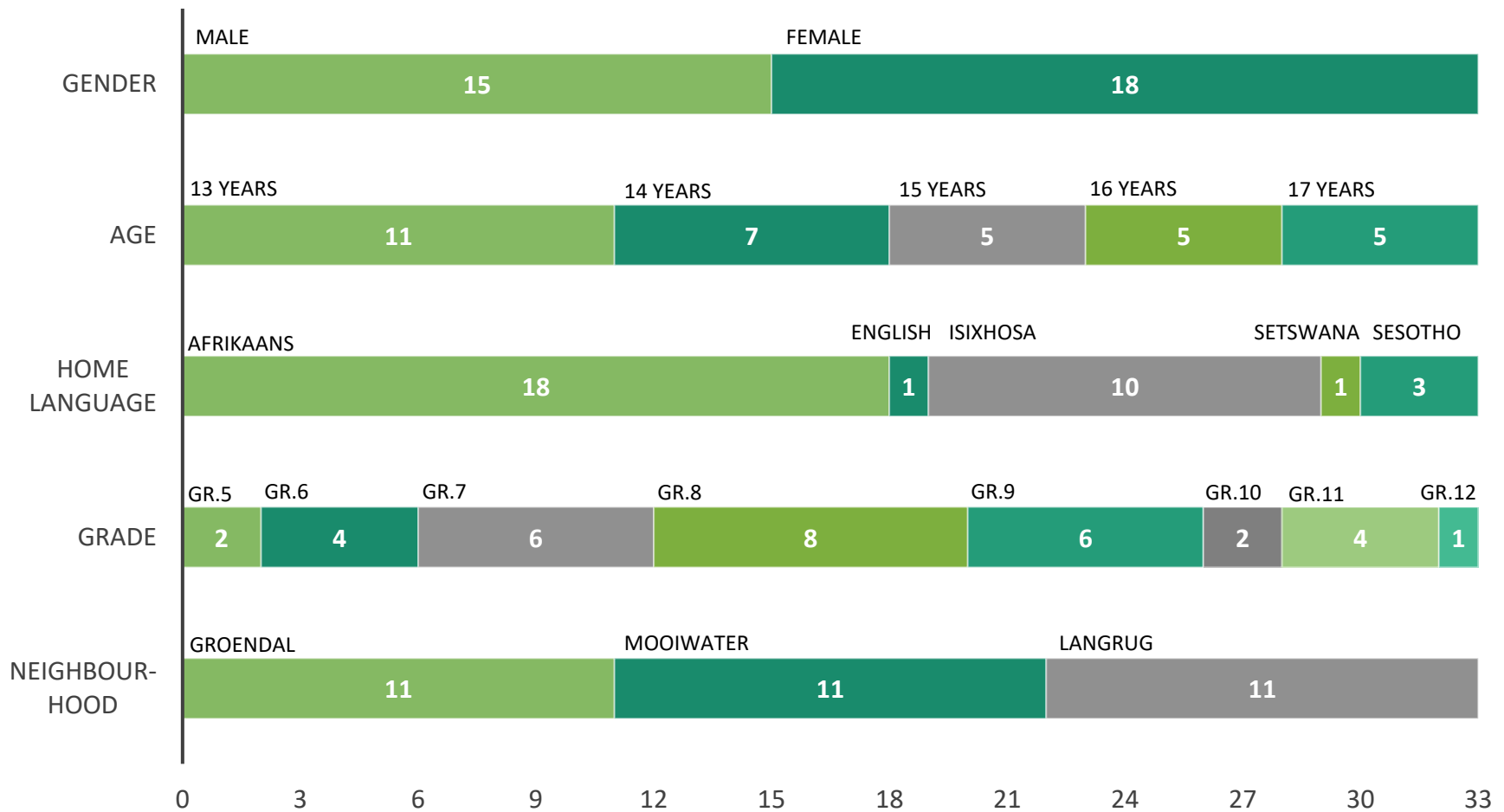


FIGURE 20: DEMOGRAPHIC INFORMATION OF PARTICIPANTS

In the following section, the data from the Q sorting and open-ended questions will be described. The data from the Q sorts will first be described by looking at the factor arrays for the two factors that were extracted from the data analysis (cf. 3.3.4.1). Thereafter, the themes that were extracted from the open-ended questions will be described to give a clearer understanding of the participants' reasoning behind the viewpoints that arose in the two factors.

4.3. DATA FROM Q SORTS

4.3.1. Selecting significant factors

As described in Chapter 3 (cf. 3.3.4.1) the data gathered in a Q study is analysed by a computer program called PQ Methodology which presents the researcher with an in-depth report of the analysed data. The researcher then interprets the report to make sense of the study's findings. The process that was followed to determine the subjective viewpoints of adolescents in Groendal, regarding environmental factors enabling their occupational well-being, will be described in the following section.

Firstly, the PQ methodology report gave a correlation matrix between complete Q sorts, showing how each Q sort correlated to each other (Watts and Stenner, 2012, p. 97). Table 7 shows what the correlation matrix for the first ten participants' Q sorts looked like, for illustration purposes. The higher the value, the higher the correlation between the two sorts was.

TABLE 7: CORRELATION MATRIX OF FIRST 10 Q SORTS

SORTS	1	2	3	4	5	6	7	8	9	10
1	100	21	41	12	41	22	28	14	-2	19
2		100	-2	2	9	-6	-12	-5	-22	-2
3			100	8	28	18	38	22	25	24
4				100	14	29	7	13	14	5
5					100	48	-5	52	49	27
6						100	28	48	54	30
7							100	5	1	32
8								100	28	31
9									100	26
10										100

Secondly, the report portrayed a standard number of seven factors that were extracted from the correlation matrix (a factor is a group of Q sorts that correlated highly with each other, therefore representing a specific subjective viewpoint held by a group of participants). These seven factors' eigenvalues were given as well as the number of defining sorts for each factor (a defining sort is a Q sort that correlates significantly with a particular factor) and can be seen in Table 8. Six out of the seven factors that were extracted had eigenvalues of higher than one, the factor with an eigenvalue of less than one was not considered (Watts and Stenner, 2005, p. 81, 2012, p. 105). Four of the factors (factors 3,4,5 and 6) only had one defining sort each, which was too few to be statistically significant, so they were also eliminated (Watts and Stenner, 2005, p. 81, 2012, p. 107).

TABLE 8: EIGENVALUES AND DEFINING SORTS

	FACTORS					
	1	2	3	4	5	6
Eigen-value	10.0077	2.5174	1.8970	1.4724	1.2912	1.1123
Defining sorts	18	3	1	1	1	1

Thirdly, the correlations between the remaining two factors (factors 1 and 2) were examined in the report. These correlations showed that factors 1 and 2 did not correlate highly with each other, hence they represented two distinctly different viewpoints that needed to be interpreted.

In conclusion, after the process of interpreting the report that was produced by the computer program PQ method and incorporating the researcher's own knowledge and critical thinking, two main subjective viewpoints were identified from the Q sorts. These two subjective viewpoints (factors) will be presented in more detail in the following section by describing each factor's factor array.

4.3.2. Factor 1

As seen in the previous section, factor 1 was the most prominent factor that arose from the Q sorts, with an eigenvalue of 10.0077 and with 18 defining sorts. The demographic information of the participants who defined this factor and the factor array for factor 1 will be described in this section (see figure 21 for factor array of factor 1).

4.3.2.1. Demographic information for factor 1

There were 18 participants whose Q sorts correlated highly enough with factor 1 to make them defining sorts for this factor. This group of participants consisted of ten females and eight males. The average age for this group was 14.5 years old, including participants of every year group between 13 and 17 years. The home languages of the participants in this group were: Afrikaans (8), isiXhosa (6), Sesotho (3) and Setswana (1). The neighbourhoods where the participants resided were: Groendal (7), Mooiwater (4) and Langrug (7).

4.3.2.2. Factor array for factor 1

The order in which the Q cards were arranged on an answer sheet for factor 1 (the factor array for factor 1) will be described in this section (see figure 21). The suggested method for factor interpretation of Watts and Stenner was used, namely to draw up a “factor interpretation crib sheet” (Watts and Stenner, 2012, pp. 150–154). This method assisted in viewing the whole factor array holistically, rather than fragmentising the information by just looking at individualised Q cards. Firstly, the Q cards that were placed very high or very low on the answer sheet were highlighted, as well as the Q cards that were placed significantly higher or lower on the answer sheet than in any other factor. Thereafter, attention was also given to specific Q cards that needed mentioning due to interesting placements, like cards resorting under 0. After the crib sheet was described, the distribution of physical environmental factors versus social environmental factors would be described for this specific factor (see figure 6 in Chapter 3 for the sub-categories of environmental factors).

Table 9 depicts the factor interpretation crib sheet for factor 1:

TABLE 9: FACTOR INTERPRETATION CRIB SHEET FOR FACTOR 1 (WATTS AND STENNER, 2012, P. 154)

FACTOR 1_CRIB SHEET	
Q cards under +4	
12	School
21	Mother
Q cards ranked higher in factor 1 than in any other factor array	
1	Food +2
2	Clinic +2

- 3 Fresh water +2
- 15 Community centre +2
- 22 Father +3
- 23 Brothers and sisters +2
- 25 Grandparents +3
- 31 Church leaders +1
- 33 Social workers +1
- 35 Teachers +3

Q cards ranked lower in factor 1 than in any other factor array

- 8 Cell phones -3
- 10 Computers -1
- 16 Cultural festivals -2
- 24 Foster-/ adoptive parents -2
- 29 Peer group -2
- 30 Neighbours -3
- 37 Pets -3

Q cards under -4

- 4 Drugs
- 28 Friends

Q cards under 0

- 5 Clothes
- 14 Sports facilities
- 17 Creativity opportunities
- 18 Weekend sporting events
- 19 Faith institutions
- 20 Faith youth meetings
- 34 Police

Furthermore, as seen in figure 21, the Q cards in the factor array have been colour-coded to better observe the distribution of physical- and social environmental factors in the sub-categories of each Q card. Factor 1's distribution of physical- and social

environmental factors was as follows: of the 20 physical environmental Q cards, eight were located on the negative side of the answer sheet, six were neutral and six were positive. Of the 19 social environmental Q cards, eight were on the negative side, one was neutral and 10 were placed on the positive side. This indicates a slight pattern in this factor array of social environmental factors being viewed as more enabling to occupational well-being and physical environmental factors as less enabling to occupational well-being.

When looking at specific sub-categories on the **positive** side of the answer sheet, it can be seen that Q cards from “Immediate family” and “Products for personal consumption” were specifically condensed on the positive side. Furthermore, considering the high placement of the two cards “School” and “Teachers”, it appeared that education was also a sub-category enabling occupational well-being for this group. Under **zero**, the categories “Products and technology for culture, recreation and sport” and “Products and technology for practice of religion or spirituality” were prominent. Furthermore, when observing the cards on the **negative** side of the answer sheet, the sub-categories of “Products and technology for communication” and “Acquaintances, peers, colleagues, neighbours and community members” were prominent.

After describing the factor array for factor 1, factor 2 will also be examined more closely.

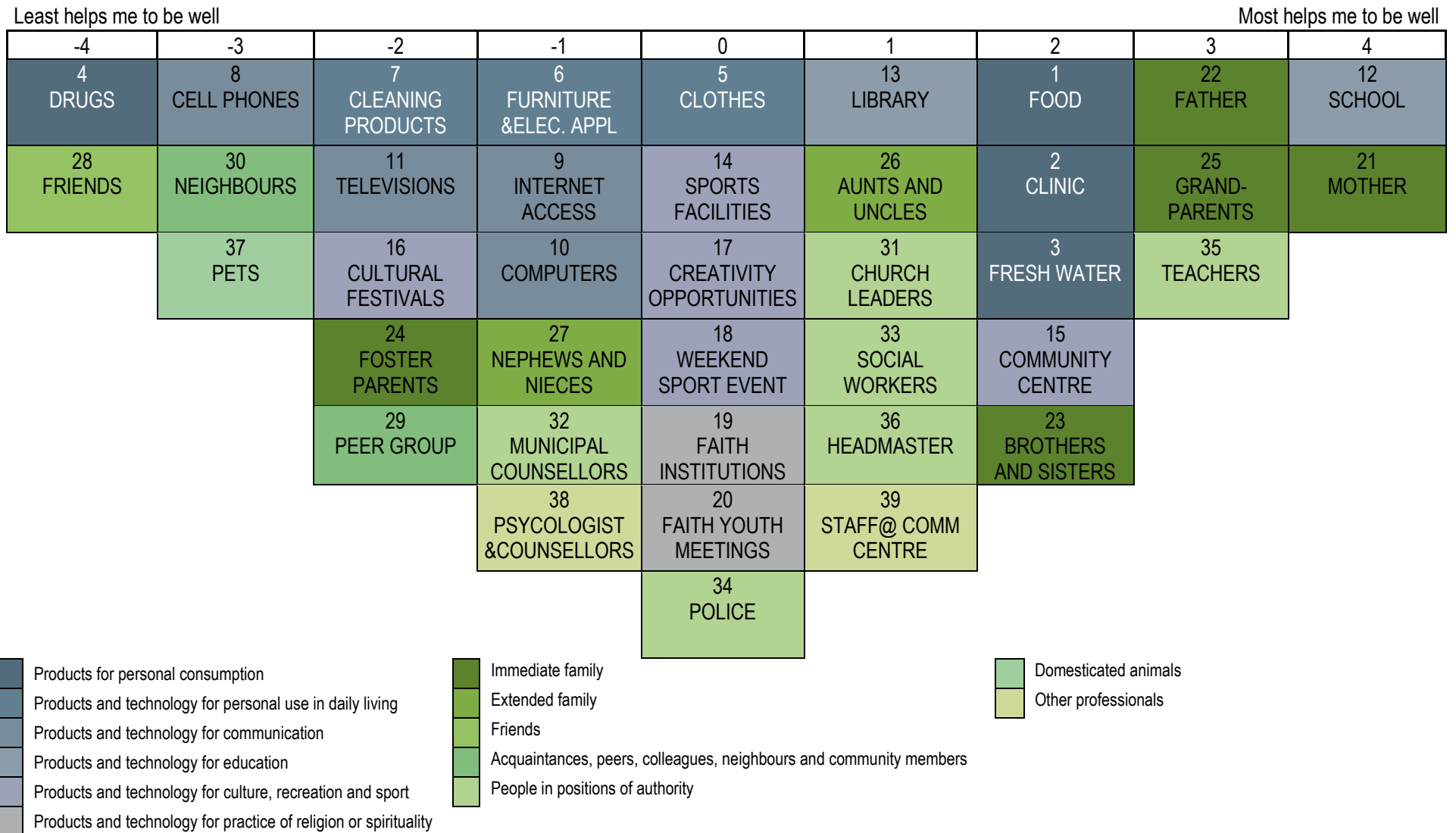


FIGURE 21: FACTOR 1 FACTOR ARRAY

4.3.3. Factor 2

As mentioned in section 4.3.1 of this chapter, factor 2 was the other significant factor that was extracted from the Q sorts, with an eigenvalue of 2.5174 and with three defining sorts. The demographic information of the participants who defined this factor and the factor array for factor 2 will be described in this section (see figure 22 for factor array of factor 2).

4.3.3.1. Demographic Information for factor 2

There were three participants whose Q sorts correlated highly enough with factor two to make them defining sorts for this factor. This group of participants consisted of two females and one male. The average age for this group was 14.3 years old, with two of the participants being 14 years old and one participant 15 years old. The home languages of the participants in this group were all Afrikaans (3). Two of the participants resided in the Mooiwater neighbourhood and the other participant in Langrug.

4.3.3.2. Factor array for factor 2

The factor array for factor 2 will be described in this section (see figure 22). Once again, the suggested method for factor interpretation of Watts and Stenner will be used, namely to draw up a “factor interpretation crib sheet”, in order to ensure holistic interpretation (Watts and Stenner, 2012, pp. 150–154). After describing the crib sheet, the distribution of physical environmental factors versus social environmental factors will again be described for this specific factor (see figure 6 in Chapter 3 for the sub-categories of environmental factors). Table 10 depicts the factor interpretation crib sheet for factor 2:

TABLE 10: FACTOR INTERPRETATION CRIB SHEET FOR FACTOR 2 (WATTS AND STENNER, 2012, P. 154)

FACTOR 2_CRIB SHEET	
Q cards under +4	
8	Cell phones
14	Sports facilities
Q cards ranked higher in factor 2 than in any other factor array	
6	Furniture and electric appliances 0
9	Internet access 0

- 11 Televisions 3
- 16 Cultural festivals 2
- 17 Creativity opportunities 2
- 27 Nephews and nieces 2
- 3 Friends 3
- 36 Pets 1

Q cards ranked lower in factor 2 than in any other factor array

- 13 Library -1
- 15 Community centre -2
- 20 Faith youth meetings -1
- 22 Father 1
- 26 Aunts and uncles -3
- 32 Municipal counsellors -3
- 34 Police -2
- 35 Teachers -3
- 39 Staff at community centre -2

Q cards under -4

- 33 Social workers
- 38 Psychologists and counsellors

Q cards under 0

- 5 Clothes
- 6 Furniture and electric appliances
- 7 Cleaning products
- 9 Internet access
- 19 Faith institutions
- 25 Grandparents
- 29 Peer group

Other significant cards

- 4 Drugs -2
- 21 Mother +3
- 23 Brothers and sisters -1

When examining the factor array for factor 2 in terms of the sub-categories of physical- and social environmental factors, as seen in figure 6, it became evident why this factor distinctly differed from the first factor. Of the 20 physical environmental Q cards, five were placed on the negative side, five were neutral and 10 were positive. On the other hand, of the 19 social environmental Q cards, 11 were placed on the negative side, two were neutral and six were positive. Hence, the participants whose Q sorts were determining for factor 2 placed more of the physical environmental factors on the positive side of their answer sheet and more social environmental factors on the negative side.

The distribution of specific sub-categories for this factor looked as follows. On the **positive** side “Products and technology for communication”, “Friends” and “Products and technology for culture, recreation and sport” were prominent. The sub-category that was prominent under **zero** was “Products and technology for personal use in daily living”. The Q cards on the **negative** side of the answer sheet for factor 2 included a number of cards from “People in positions of authority” as well as “Other professionals”.

After the factor array for factor 2 has been described, a summary will be given of the information that was described in this previous section.

Least helps me to be well Most helps me to be well

-4	-3	-2	-1	0	1	2	3	4
33 SOCIAL WORKERS	26 AUNTS AND UNCLAS	2 CLINIC	13 LIBRARY	5 CLOTHES	1 FOOD	10 COMPUTERS	11 TELEVISIONS	8 CELL PHONES
38 PSYCHOLOGIST & COUNSELLORS	32 MUNICIPAL COUNSELLORS	4 DRUGS	20 FAITH YOUTH MEETINGS	6 FURNITURE & ELEC. APPLIA	3 FRESH WATER	12 SCHOOL	21 MOTHER	14 SPORTS FACILITIES
	35 TEACHERS	15 COMMUNITY CENTRE	23 BROTHERS AND SISTERS	7 CLEANING PRODUCTS	18 WEEKEND SPORT EVENT	16 CULTURAL FESTIVALS	28 FRIENDS	
		34 POLICE	24 FOSTER PARENTS	9 INTERNET ACCESS	22 FATHER	17 CREATIVITY OPPORTUNITIES		
		39 STAFF@ COMM CENTRE	30 NEIGHBOURS	19 FAITH INSTITUTIONS	37 PETS	27 NEPHEWS AND NIECES		
			31 CHURCH LEADERS	25 GRAND-PARENTS	36 HEADMASTER			
				29 PEER GROUP				

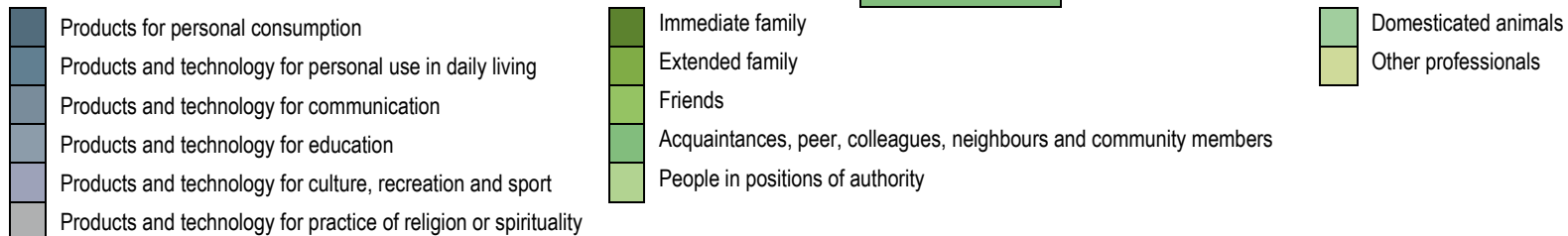


FIGURE 22: FACTOR 2 FACTOR ARRAY

4.4. THEMES FROM OPEN-ENDED QUESTIONS

4.4.1. Introduction to themes from open-ended questions

As described in Chapter 3 (cf. 3.3.3.2), every participant was asked to answer open-ended questions after the Q sorting process. The information that was gathered through the open-ended questions proved to be very helpful in the interpretation and understanding of the data. During interviews, the participants' depth in insight about their environment's influence on occupational well-being alluded strongly to their occupational adaptations. The themes, categories and codes that were extracted from the open-ended question will be presented in this section. However, the data will merely be described, it will not yet be discussed in the light of relevant literature and the meaning of the themes will not yet be explored. The full discussion of the implications of this data will be presented in Chapter 5.

4.4.2. Selecting themes, from open-ended questions' data

Through the process described in Chapter 3 (cf. 3.3.4.2), the data from the open-ended questions was reduced and categorised to extract codes, categories and themes. Thirty-seven pages of data were transcribed word for word in the language that the participants used (English or Afrikaans). The Afrikaans data was translated literally and word for word (and in many instances included grammatical errors) to preserve the honest and informal tone that characterised these interviews. At the end of the coding process, two major themes were identified. Each theme consisted of several categories and each category was comprised of various codes.

The themes, categories and codes are depicted in Table 11, which shows how they were grouped. Each theme will be presented by looking at the participants' own words that were used for each category and code. The reader is reminded that the results will only be presented in this section. The discussion of the results by means of triangulation with literature can be found in Chapter 5.

To enhance trustworthiness in the presentation of the data, participants will be quoted by using their participation numbers (e.g. P003). This will demonstrate that a variety of participants were cited in the analysis and description of the data as a contributor to dependability of the data. Furthermore, the original and translated quotation will be

presented (translations will follow original verbatims and will be typed in italics). Table 11 will continually be referred to, to keep the reader orientated in terms of the themes, categories and codes.

TABLE 11: THEMES, CATEGORIES AND CODES FROM OPEN-ENDED QUESTIONS

Themes	Categories	Codes
4.4.3. ENABLERS	4.4.3.1. Immediate family	a. Contributing to forming moral values b. Providing educational opportunities c. Meeting physical needs d. Providing social support
	4.4.3.2. Educational resources	a. Providing a better future b. Providing knowledge c. Providing emotional support
	4.4.3.3. Recreational resources	a. Providing broader occupational choices b. Providing opportunities for a better future
4.4.4. BARRIERS	4.4.4.1. Physical barriers	a. Drugs b. Cell phones
	4.4.4.2. Social barriers	a. Friends b. Neighbours c. Fathers

The two main themes that were identified were (1). **Environmental factors enabling occupational well-being** and (2) **Environmental factors as barriers to occupational well-being**. Each theme had categories sorted under them. The categories under the first theme were: (1) Immediate family, (2) Educational resources and (3) Recreational resources as enablers to occupational well-being. The categories under the second theme were: (1) Physical- and (2) Social barriers to occupational well-being. The codes under each category were identified by finding patterns in *why* the participants experienced different environmental factors as enablers or barriers to occupational well-being. Even though the research question for this study was to describe *enablers* to occupational well-being for adolescents, it was deemed necessary to allow participants to explain their choices regarding the

barriers to occupational well-being, since it provided a bigger picture of the factors whose influences should be minimised in the pursuit of occupational well-being for this group of individuals. These themes, categories and codes will be presented in the following sections.

4.4.3. Theme 1: Environmental factors enabling occupational well-being

The first major theme that arose from the open-ended questions' data was "Environmental factors enabling occupational well-being". The three categories under this theme were: **(1) Immediate family enabling occupational well-being (2) Education enabling occupational well-being and (3) Recreational resources enabling occupational well-being.** The codes under each category described the different reasons *why* these environmental factors enabled occupational well-being. These reasons would be referred to as codes.

4.4.3.1. Immediate family enabling occupational well-being

Theme	Category	Codes
4.4.3. ENABLERS	4.4.3.1. Immediate family	a. Contributing to forming moral values b. Providing educational opportunities c. Meeting physical needs d. Providing social support

By far the most prominent category that was found in the data from the open-ended questions, was the category of "Immediate family enabling occupational well-being". Immediate family in this context referred to mother, father, brothers and sisters and grandparents. Most participants named at least one of the people who formed part of their immediate family as highly enabling to their well-being. Of all the environmental factors that were discussed by participants, the one that was mentioned the most frequently by participants was "Mother". "Father" and "Grandparents" were also prominent in the analysis.

The reasons why the participants felt that their immediate families enabled occupational well-being will be described by using their own words.

a. Immediate family contributing to forming of moral values

“My ma en die skool help my die meeste, want my ma help my altyd om goeters reg te doen en om skool toe te gaan, en sy’s ‘n positiewe invloed op my. *My mother and the school help me the most, because my mother always helps me to do things right and to go to school and she has a positive influence on me.*” (P023)

“...jou pa en ma is baie belangrik in jou lewe, hulle is altyd daar vir jou in tyd van nood en om vir jou op die regte pad te sit. *Yes, your dad and mom are very important in your life. They are always there for you in times of need and to put you on the right path.*” (P042)

b. Immediate family providing educational opportunities

Mothers are very important, because, she help children to go at school then she gives you money to go at school. She gives you money to buy clothes or buy themselves and then mothers, mothers make for us a home to live, not live at the street.” (P013)

“Because, my mother, it’s my mother who sent me to school, that’s why I’m in school. My father wasn’t in charge when I was going to school.” (094)

“My pa moedig my aan om in die skool te bly. *My dad encourages me to stay in school.*” (P024)

“My oupa en ouma help my deur die skool loopbaan. *My grandfather and grandmother help me through the school career.*” (P078)

c. Immediate family meeting physical needs

“I have placed these cards because, my mother is the number one person who helps me. When I need something, I can get it from my mom and she works hard for me.” (P076)

“My pa koop ook vir my goete en kos, en sê nou ons moet winkel toe gaan dan gaan werk hy vir ons vir kos. En my ma en my pa werk vir ons kos. *My dad also buys me things and food. And my mom and dad work for our food.*” (P040)

d. Immediate family providing social support

“Ek het my ma daar gesit omdat my ma is heel eerste op my lys. Sy sorg vir my, sy gee om vir my. *I put my mother there, because my mother is first on my list. She looks after me, she cares for me.*” (P051)

“Jou oupas en jou oumas kan jy meestal goed vertel, kan jy luister wat hulle sê. *Your grandfathers and grandmothers, you can mostly tell them things. You can listen to what they say.*” (P100)

“And then obviously I only have my mom, my dad passed away, I would speak to her about things. It doesn't matter if we argued, she is a person I could go to.” (P038)

4.4.3.2. Educational resources enabling occupational well-being

Theme	Category	Codes
4.4.3. ENABLERS	4.4.3.2. Educational resources	a. Providing a better future b. Providing knowledge c. Providing emotional support

The other very prominent category that was extracted from the open-ended questions' data was “Educational resources enabling occupational well-being”. The three environmental factors that were seen as educational resources for adolescents were school, teachers and cell phones. This theme seemed to also thread through many of the other categories. For example, as seen in the “Immediate family” category, one of the codes included that immediate families supported the adolescents' educational needs. These ways in which educational resources enabled occupational well-being will be described by looking at the codes that arose from the data.

a. Educational resources providing a better future

“En by die skool, ons makeer edukasie, want edukasie is mos die sleutel tot die toekoms. *And at school, we need education, because, education is the key to the future.*” (P003)

“School, it give me that power to know I have the right to be what I want to be when I grow up.” (P030)

“I packed my teacher here, because they can teach me things that I do not know and I can have a good future.” (P088)

b. Educational resources providing knowledge

“Okay, daar by die skool, nê, mens leer nuwe baie goed, soos elke dag iets nuuts. En dit expand ‘n mens se knowledge van verskillende goeters en knowledge is baie belangrik. *Okay, there at school, you learn many new things, like everyday something new. And that expands your knowledge about different things and knowledge is very important.*” (P032)

“I’ve placed these teachers, because teachers help us very much at schools and then teachers teach us more things, like LO about us and about our mothers and about our situations at our communities and then they ask us what happened and then they try to solve it.” (P013)

“Rekenaars en selfone help my met informasie vir skoolwerk. *Computers and cell phones help me with information for schoolwork.*” (P047)

c. Educational resources providing emotional support

“At school I can talk to my teachers.” (P111)

“Die onderwysers, jy kan sekere tye goed vir hulle vertel. *Teachers, you can tell them things sometimes.*” (P100)

4.4.3.3. Recreational resources enabling occupational well-being

Theme	Category	Codes
4.4.3. ENABLERS	4.4.3.3. Recreational resources	a. Providing broader occupational choices b. Providing opportunities for a better future

The third and final category under the theme “Environmental factors enabling occupational well-being” was “Recreational resources enabling occupational well-being”. This theme was less prominent than the other two, but it was mentioned sufficiently to be declared a significant category in understanding the enablers to occupational well-being for the participants. The two environmental factors seen as recreational resources were “Sport facilities” and “Creativity opportunities”. The participants’ reasons for stating that these environmental factors enabled occupational well-being for them, will be described as the codes under this category.

a. Recreational resources providing broader occupational choices

“En sport hou my uit die dwelms en goete uit. *And sport keeps me out of the drugs and stuff.*” (P062)

“Sportfasiliteite hou die kinders besig met sport en hou hulle uit die moeilikheid uit. *Sport facilities keep the children busy with sport and keep them out of trouble.*” (P042)

b. Recreational resources providing opportunities for a better future

“Community centre, where we get what we want to know, it’s where we see our future, where it goes, like if you can play sports like soccer, community centre teaches us to play them.” (P076)

4.4.4. Theme 2: Environmental factors as barriers to occupational well-being

The second theme that arose from the open-ended questions' data was "Environmental factors disabling occupational well-being". There were two categories under this theme. The categories (and their codes) were: **(1) Physical barriers to occupational well-being** (Drugs and Cell phones), **(2) Social barriers to occupational well-being** (Friends, Neighbours and Fathers). The titles of these two categories were derived from the study's specific focus on *physical-* and *social* environmental factors' influencing occupational well-being. Once again, the data revealed a few different reasons *why* these environmental factors disabled occupational well-being for the participants. These reasons will be described under each code.

4.4.4.1. Physical barriers to occupational well-being

Theme	Category	Codes
4.4.4 BARRIERS	4.4.4.1. Physical barriers	a. Drugs b. Cell phones

The first category that arose from the data under the theme of barriers to occupational well-being was physical environmental factors. Physical environmental factors refer to environmental factors in the participant's community that are man-made (World Health Organization, 2007, p. 191; American Occupational Therapy Association, 2014, p. S8). The two codes (representing environmental factors) that resorted under this theme were "Drugs" and "Cell phones".

a. Drugs

"Drugs" was the environmental factor that was most consistently viewed as detrimental to occupational well-being by participants. The reasons for this will be described in the participants' own words. It should be noted that only one participant admitted that she had used drugs before. All the other participants did not mention anything about using drugs themselves.

"Drugs, I have smoked drugs before, but now I am already done with them." (P094)

i. ***Drugs negatively affecting health***

“And I don’t like drugs because drugs can make me not feel well in my brain. I don’t like drugs.” (P088)

“Ek gebruik nie dwelms nie. Dit kan jou liggaam beskadig en ek sien die mense hier by ons plek hou van glue gebruik en dit beskadig jou longe en goed, dan raak jy al hoe maerder. *I don’t use drugs. It can damage your body and I see the people here at our place like to use glue and that damages your lungs and stuff, then you become skinny.*” (P049)

ii. ***Drugs negatively affecting education***

“Drugs, drugs, it does not help us, because it damage us, because children leave school because of drugs, some children are smoking at the classroom, then teacher deal with that, but, she did not listen, because he/she is drunk.” (P013)

“Drugs are not so good for people, because of they damages people’s lives, because they can’t focus on school they focus on drugs.” (P076)

iii. ***Drugs negatively affecting broader community***

“Dwelms het ‘n groot negatiewe impak op die welstand van die broader community. *Drugs have a very negative impact on the well-being of the broader community.*” (P038)

b. Cell phones

The second physical environmental factor that was viewed as a barrier to occupational well-being was “Cell phones”. The participants’ reasons for this viewpoint will be described in the following section.

i. ***Cell phones encouraging occupational restrictions***

“And cell phones, something we watch on the cell phones, and as a child we want to do those bad things.” (P073)

ii. ***Cell phones negatively affecting education***

“The cell phones is just gonna take your mind of your work, like your math and your English.” (P043)

“Selfone wil ook nie dat die kinders regtig studeer nie en hou hulle weg van die werk af. *And cell phones don't want the children to really study and keep them away from work.*” (P042)

4.4.4.2. Social barriers to occupational well-being

Theme	Category	Codes
4.4.4. BARRIERS	4.4.4.2. Social barriers	a. Friends b. Neighbours c. Fathers

The second category under the theme: “Environmental factors as barriers to occupational well-being” was “Social barriers to occupational well-being”. Social environmental factors refer to the relational support that the participant receives in his or her environment from a variety of people in the community (World Health Organization, 2007, p. 205; American Occupational Therapy Association, 2014, p. S8). The three codes (social environmental factors) that were viewed by participants as barriers to their occupational well-being were: “Friends”, “Neighbours” and “Fathers”. These codes will be described below.

a. Friends

The first social environmental factor that was not viewed by participants as enabling to their occupational well-being was “Friends”. The reasons for this viewpoint will be described below.

i. ***Friends enhancing occupational restrictions***

“Friends, sometimes friends are a bad influence, if they do something wrong they will want you to join them.” (P030)

“I have a group of seven friends, but those friends are bad influences. At the end of the of the day you will end up like them.” (P014)

ii. ***Friends being untrustworthy***

“Friends, they are not right to you, because you tell them something that happened to you and you tell them not to tell other friends, but then they go to tell other friend.” (P089)

“Want, jy kannie vertrou vir hulle as jy iets gesê het nie en hulle kan sleg praat van jou iets wat nie waar is nie (bure en vriende). *Because, you can't trust them when you told them something, and they can speak bad about you, things that are not true (neighbours and friends).*” (P100)

b. Neighbours

The second code under the category of social disablers to occupational therapy was “Neighbours”. The reason for this code will be described below.

i. ***Neighbours abusing alcohol***

“Ons bure, die meeste van die mense in my straat drink, en onderkant in my straat is daar 'n tavern. *And the neighbours, most of the people in my street drink, and at the bottom of our street there is a tavern.*” (P010)

ii. ***Neighbours gossiping***

“And neighbours, they love to gossip about other families.” (P073)

“Bure, hulle is amper so, hulle skinner agter, dan praat hulle oor my en my ma'le. Sê ma ons groet vir hulle dan groet hulle nie vir ons nie. *Neighbours, they are almost like that, they gossip behind, then they talk about me and my parents. Let say we greet them, then they don't greet us.*” (P040)

c. Fathers

The last code under social disabler to occupational well-being was “Fathers”. Even though one group of participants viewed ‘Fathers’ as enablers to occupational well-

being, there was also a group that viewed the absence of their fathers as a barrier to their occupational well-being. The reasons that participants gave for this viewpoint will be quoted in the following section.

i. **Fatherlessness**

“Ek het die kaartjie van my pa so gesit, want my pa is oorlede. I *put the card of my father like that, because my dad passed away.*” (P078)

“En my pa, hy gee nie om vir my nie. *And my dad, he doesn't care about me.*” (P047)

“Ek en my pa kom nie baie goed oor die weg nie. *My dad and I don't get along very well.*” (P002)

“My pa is oorlede. *My dad passed away.*” (P078)

4.5. CONCLUSION

In Chapter 4 the results from this Q study were presented by firstly looking at the analysed data from the Q sorts and then by looking at the data from the open-ended questions. The data from the Q sort presented two main factors, representing two distinct subjective viewpoints of enablers to occupational well-being. Factor 1 represented the largest group of participants and factor 2 represented a smaller group of participants. The data from the open-ended questions provided supportive data to the two factors that were identified in the Q analysis. Two major themes were extracted from the open-ended questions' data, and each had categories and codes that were described under them. The two themes were: Theme 1: Environmental factors enabling occupational well-being and Theme 2: Environmental factors as barriers to occupational well-being. The categories under theme 1 were: (1) Immediate family enabling occupational well-being (2) Education enabling occupational well-being and (3) Recreational resources enabling occupational well-being. The categories under theme 2 were: (1) Physical barriers to occupational well-being, (2) Social barriers to occupational well-being. In Chapter 5, the results presented in Chapter 4 will be discussed in the light of relevant literature.

5. CHAPTER 5

Discussion of Results

5.1. INTRODUCTION

In Chapter 5, the results from the Q sorts and open-ended questions that were presented in the previous chapter, will be discussed in the light of relevant literature. This will address the research question: *Which physical- and social environmental factors do adolescents in Groendal view as enabling to their occupational well-being?*

Through utilising Q methodology in this study, quantitative and qualitative results were gathered to address the research question. The quantitative results indicated two main factors, which represented two distinct subjective viewpoints regarding environmental factors that enabled occupational well-being (cf. 4.3). The qualitative results were extracted from the data from the open-ended questions and formed two main themes, each with categories and codes. (cf. 4.4). After the results were gathered, they were interpreted holistically to identify which environmental factors adolescents from Groendal viewed as enablers to their occupational well-being.

After interpreting the results from the Q sorts and open-ended questions, four main environmental factors were identified as enablers to occupational well-being according to adolescents living in Groendal. The four environmental factors that adolescents in Groendal viewed as enabling to their occupational well-being were: **1) Immediate families, 2) Educational resources, 3) Recreational resources, and 4) Basic resources.** The reasons *why* these environmental factors were identified as enablers to occupational well-being will be discussed in this chapter through triangulation with literature and were summarised in Table 12.

TABLE 12: ENVIRONMENTAL ENABLERS TO OCCUPATIONAL WELL-BEING IN GROENDAL COMMUNITY

Environmental enablers to occupational well-being in Groendal Community and reasons why	
Environmental factors	Reasons why
1. Immediate families	a. Contribute to forming moral values b. Provide educational opportunities c. Meet physical needs

	d. Provide social support
2. Educational resources	a. Provide a better future b. Provide knowledge c. Provide emotional support
3. Recreational resources	a. Provide broader occupational choices b. Provide opportunities for a better future
5. Basic resources	a. Form baseline for enabling occupational well-being

It should be noted that the barriers to occupational well-being that were described in the results chapter will not be discussed independently, since they do not directly answer the research question. However, they will be alluded to throughout the discussion, as they indirectly contributed to a better understanding of how the adolescents from Groendal viewed occupational well-being. In essence, discussing the environmental factors that were viewed as barriers to occupational well-being by adolescents from Groendal, can aid in providing a deeper understanding of the enablers by means of contrast.

The results will be discussed in order to answer the research question of which physical- and social environmental factors enabled occupational well-being of adolescents living in the Groendal community. In the light of the olive tree analogy (cf. 1.1), this chapter provides a deeper understanding regarding the support beams around adolescents in this community by identifying and discussing the four environmental factors that enable growth according to the young trees.

5.2. IMMEDIATE FAMILY ENABLING OCCUPATIONAL WELL-BEING

In both the quantitative and qualitative data, immediate family members emerged as prominent enablers to occupational well-being. In factor 1, immediate family members (Mother, Father, Grandparents and Siblings) were all found between +2 and +4 on the factor array, indicating that they contributed strongly to occupational well-being according to the participants (cf. 4.3.2.2). In factor 2, 'Mothers' were placed under +3 (cf. 4.3.3.2). Furthermore, in the open-ended questions' results, immediate family was

frequently discussed by participants as an enabler to occupational well-being (cf. 4.4.3). 'Mothers' were the most enabling immediate family member according to the results, as they were ranked under +4 in factor 1 (cf. 4.3.2.2), under +3 in factor 2 (cf. 4.3.3.2) and they were the most frequently referred to environmental factor in the open-ended questions (cf. 4.4.3.1).

Immediate families' important role in the well-being of adolescents (especially those from communities with limited access to resources) is confirmed in occupational therapy literature (Rybski and Israel, 2017, pp. 342–343) and in other disciplines (Western Cape Government, 2013, pp. 36–40; Kubik *et al.*, 2014, p. 672; Ward, Makusha and Bray, 2015, pp. 69–73; Berry and Malek, 2017, pp. 51–52; Harrison, 2017, p. 45; Jamieson and Richter, 2017, p. 35). In this discussion, however, the category of immediate families enabling occupational well-being is explored deeper through discussing the reasons *why* adolescents in this study viewed their family members as enablers to their occupational well-being. Furthermore, the category is discussed specifically from an occupational science point of view, exploring how immediate family members met the occupational needs of adolescents, thereby enabling *occupational* well-being specifically.

The four reasons that were found in the open-ended questions' data for why the participants of this study viewed their immediate families as enablers to their occupational well-being were because they (cf. 4.4.3.1):

- Contribute to forming moral values
- Provide educational opportunities
- Meet physical needs, and
- Provide social support

These four reasons will be discussed in the following sections. In each section, reference will be made to the most prominent statements from the open-ended questions to keep the reader informed of the results that are being discussed. However, cross references will also be provided to revisit the other statements that were presented in Chapter 4.

5.2.1. Immediate family contributing to forming moral values

The first reason that was extracted from the open-ended questions' data, explaining why participants viewed their immediate families as enablers to occupational well-being was because they **contribute to the forming of moral values** of the adolescents. In the open-ended questions' results, participants noted that their parents and grandparents helped them to discern between right and wrong. It should be noted that the term 'moral values' in this section does not refer to religious values, but rather to the development of an internal awareness of what is right and good according to the individual. Furthermore, by stating that immediate families contribute to the formation of moral values in adolescents, it is not implied that immediate families are the only contributors to this development in adolescents, but rather that immediate families have a role to play in this process. One quotation which supports this reason will be repeated, but the others can be revisited in Chapter 4 (cf. 4.4.3.1.a).

"...my ma help my altyd om goeters reg te doen en om skool toe te gaan, en sy's 'n positiewe invloed op my. *My mother and the school help me the most, because my mother always helps me to do things right and to go to school and she has a positive influence on me.*" (P023)

Several concepts found in literature supported that immediate families could contribute to the formation of moral values in adolescents and emphasised the importance of this development in human beings. Firstly, the OTPF describes values as beliefs that are acquired regarding what is right and good and important and categorises values under client factors within the domain of occupational therapy (American Occupational Therapy Association, 2014, pp. S4, S22). All aspects of the domain of occupational therapy (including values) interact with each other and impact a person's occupational identity, health and well-being (American Occupational Therapy Association, 2014, p. S4). Hence, forming one's own set of values, is an essential aspect of occupational well-being. Thus, by recognising that their immediate family's moral guidance contributed to their occupational well-being, the adolescents from this study showed an intrinsic awareness of the importance of value formation in experiencing occupational well-being.

Secondly, the Model of Human Occupation (MOHO) by Kielhofner, names *values* as one of three concepts that work together to form a person's volition (Forsyth and Kielhofner, 2011, p. 53). Volition refers to why people chose to engage in specific occupations (Forsyth and Kielhofner, 2011, p. 53; Turpin and Iwama, 2011, p. 140). Kielhofner argued that people's values (what they see as good, right and important) played an important role in the occupational choices that people made and therefore contributed to the formation of people's occupational identities (Forsyth and Kielhofner, 2011, p. 54). Hence, by contributing to the formation of moral values in adolescents, immediate families formed part of the development of healthy occupational identities in adolescents. This, in turn, contributed to the enabling of occupational well-being for adolescents in the Groendal community.

Thirdly, in accordance with the previous argument regarding the influence of values on the development of healthy occupational identities, Erikson described adolescence as a life stage with specific emphasis on identity formation (Stephanie, 2005, p. 12; Louw *et al.*, 2014, p. 20). According to Erikson, the successful completion of this life stage would lead to establishing an identity and this would minimise confusion (Louw and Louw, 2014, p. 360). An important part of establishing one's own identity, is developing one's own ethical compass and set of *values*. (Stephanie, 2005, p. 12; Louw and Louw, 2014, p. 361; World Health Organization, 2017, p. 7). By developing a unique set of moral values, adolescents experience a sense of autonomy, since they are enabled to make independent choices based on their developed values. Thus, by contributing to the formation of adolescents' values, immediate families are contributing to adolescents' identity formation in this critical developmental stage, which enables occupational well-being.

Lastly, the concept of occupational choice can aid in understanding immediate families' contribution to the formation of moral values in adolescents. By contributing to the formation of values in adolescents, immediate family members enable the adolescents to make occupational choices that support well-being within their contexts and thereby counter occupational restrictions (Galvaan, 2015, p. 39). This happens as the adolescents develop an internal locus of control regarding their occupational choices, which correlates with their moral values. Through exercising occupational choices which correlate with their moral values, adolescents gain a

sense of agency over their lives, which is named by Doble and Santha as an occupational need which enables occupational well-being (Doble and Santha, 2008, p. 186). This is important in the light of the prevalence of occupational restrictions in the Groendal community, where drug abuse, school drop-out and teenage pregnancies were common (Gouws *et al.*, 2008b, p. 239; Western Cape Government, 2013, p. 24; Kubik *et al.*, 2014, p. 673; Statistics South Africa, 2016b, p. 26). In essence, when adolescents are enabled to develop their own value systems, they gain agency to make occupational choices that are meaningful despite the pressures caused by occupational restrictions (Galvaan, 2015, pp. 40–41). Through this process occupational well-being is enabled.

The adolescents' view that immediate families enabled occupational well-being because they contributed to the formation of moral values is to be noted, since adolescence is often characterised as a time when individuals resist the authority and moral input from parents (Valizadeh, Zamanzadeh, Rassouli and Farshi, 2018, pp. 29–30). The relationship between adolescents and parents, is often known to be tumultuous, with parents experiencing adolescents as defiant to their authority and difficult to control (Valizadeh *et al.*, 2018, p. 27). However, in this study, the results showed that adolescents from this study recognised the contribution their immediate families made towards the formation of their moral values as an enabler to their occupational well-being.

5.2.2. Immediate family providing educational opportunities

The second reason found in the open-ended questions' results, explaining why immediate families were highly ranked in factors 1 and 2, was because they **provided educational opportunities**. Specific reference was made in the open-ended questions' results to the financial and material support that adolescents received from immediate family members which enabled school attendance and access to the necessary clothes and equipment for school. Furthermore, some also commented that immediate families encouraged and supported them to do well in school. One of the participants' direct words will be repeated and readers can revisit Chapter 4 (cf. 4.4.3.1.b) to revisit the other verbatims.

“Because, my mother, it’s my mother who sent me to school, that’s why I’m in school. My father wasn’t in charge when I was going to school.” (094)

Literature confirms that immediate families who encourage and support adolescents in their educational pursuits, contribute to the adolescents’ abilities to thrive in life (Jamieson and Richter, 2017, p. 35). By providing educational opportunities to the adolescents in their care, immediate families create a sense of belonging for adolescents, communicating that the adolescents’ educational pursuits matter and that the family is supportive of these pursuits (Hammell, 2015a, p. 44). This support from immediate families is especially valuable in the South African context, where one of the most prevalent reasons given by children, aged seven to 18, for school drop-out is ‘no money for fees’ (Statistics South Africa, 2016b, p. 12). From an occupational justice perspective, the reality that many South African adolescents do not have access to quality education due to structural inequalities, is a violation of their occupational rights (Hammell, 2015b, p. 4). Hence, by providing educational opportunities to adolescents, immediate families are combatting occupational injustice in the lives of adolescents.

Furthermore, Doble and Santha’s (2008, p. 186) description of the occupational need *accomplishment* can aid in understanding why immediate family’s provision of educational opportunities enables occupational well-being. They argued that one of the occupational needs that must be met for people to experience occupational well-being, was accomplishment. This referred to occupations that provided a sense of achievement, mastery and meeting of goals (Doble and Santha, 2008, p. 186). Immediate families who provide for their children’s education enable them to experience accomplishment through gaining new skills and knowledge, thereby enabling occupational well-being. This concept is supported by Kielhofner in the MOHO’s description of the formation of occupational identity (Forsyth and Kielhofner, 2011, p. 58). It stated that for people to form healthy occupational identities, they needed to receive positive feedback from the occupations they engaged in, providing them with a sense of confidence in their abilities (Forsyth and Kielhofner, 2011, p. 58). By attending school and developing cognitively, adolescents can receive this positive feedback. Hence, by enabling adolescents to utilise educational resources,

immediate families are providing opportunities to form healthy occupational identities which enable occupational well-being.

Once again, the concept of occupational choice, as described by Galvaan, could be an underlying reason why adolescents viewed their immediate family's provision of educational opportunities as enabling to occupational well-being (Galvaan, 2015, p. 39). By providing educational opportunities for adolescents, immediate families broaden the occupational choices that were available to adolescents, since access to educational resources had been proven to minimise poverty and provide broadened opportunities for vocational possibilities (Republic of South Africa, 1996, p. 12; Western Cape Government, 2013, pp. 41–45; Kubik *et al.*, 2014, p. 672; Berry and Malek, 2017, p. 53; Jamieson and Richter, 2017, pp. 35, 38; World Health Organization, 2017, p. xviii). Hence, immediate families' provision of educational opportunities for adolescents could limit occupational deprivation caused by limited access to occupational choices, regarding work opportunities caused by lack of necessary education (Wilcock and Townsend, 2004, p. 81; Durocher *et al.*, 2014, p. 421).

Despite the limited socio-economic resources that many families in Groendal had access to, the participants of this study still viewed the provision of educational opportunities, from immediate families, as enabling to occupational well-being. This contradicts the assumption that families with limited resources due to socio-economic constraints cannot provide educational support to their children due to the 'poverty cycle' and lack of resources (Ward, Makusha and Bray, 2015, p. 69; Rybski and Israel, 2017, p. 350). Hence, through providing occupational opportunities for adolescents, immediate families were limiting occupational injustices caused by structural limitations in the community of Groendal (Hammell, 2015b, p. 4).

5.2.3. Immediate family meeting physical needs

The third reason found in the open-ended questions' results explaining why participants viewed immediate families as enablers to occupational well-being was: because they provided in the adolescents' **physical needs**. Participants mentioned that their families bought them food and clothes and that they provided things that they needed. Hence, in this section, physical needs refer to basic material objects

that are necessary for survival including, food, water, clothes and shelter. The quotation below illustrates how the participants described their immediate families' role in providing physical needs. The other quotations can be found in Chapter 4 (cf. 4.4.3.1.c).

“My pa koop ook vir my goete en kos, en sê nou ons moet winkel toe gaan dan gaan werk hy vir ons vir kos. En my ma en my pa werk vir ons kos. *My dad also buys me things and food. And my mom and dad work for our food.*” (P040)

The adolescents from Groendal's view that their immediate families enabled occupational well-being through providing in their physical needs correlated with occupational therapy- and interdisciplinary literature. Firstly, the PEOP model in occupational therapy, which emphasises the role of the environment in well-being and quality of life, confirms that physiological factors (sleep, nutrition and health) play an important role in the well-being and occupational performance and participation of people (Christiansen *et al.*, 2011, p. 96). If people do not have adequate access to these resources, well-being and quality of life are severely inhibited (Christiansen *et al.*, 2011, p. 95). This confirms why the adolescents from this study viewed the physical provision from their families as enabling to occupational well-being, especially in the light of the restricted socio-economic context where the participants lived. Since 40% of the population in and around Groendal received a monthly income of only R1600 or less (Stellenbosch Municipality, 2018), food security, clothes to wear and shelter became needs that were not necessarily consistently met for adolescents in this community. Hence, adolescents from Groendal showed an awareness that their immediate families enabled occupational well-being by providing them with food, shelter and health care.

Secondly, Maslow's hierarchy of needs explains why meeting the physical needs of adolescents in Groendal was essential to enabling occupational well-being. The hierarchy states that no form of higher fulfilment can be reached if a person's basic physiological needs (food, water, shelter etc.) are not met (Pederson, 2017, p. 3; Aanstoos, 2018). Hence, by providing in the adolescents' physical needs, immediate families were providing the adolescents with opportunities to aspire to meeting other important needs, such as love and belonging, esteem and self-actualisation

(Pederson, 2017, p. 3; Aanstoos, 2018). Furthermore, Max-Neef, in his description of fundamental human needs stated that food and water were not a need, but rather a 'satisfier' of the need to survive (Max-Neef, 2008, p. 1). Thus, by providing food, water and health care to adolescents, immediate families were providing means with which the adolescents could satisfy their fundamental need for survival/subsistence (Max-Neef, 2008, p. 1).

Thirdly, Galvaan's description of how human occupations are influenced by the social, economic and physical environment, confirmed why the immediate families' provision of physical resources enabled occupational well-being in the specific context of Groendal (Galvaan, 2017, p. 49). She emphasised how the bigger economic and social context influenced the occupational possibilities that people had access to and how occupational injustice could occur in contexts where occupational possibilities were limited due to these structural limitations (Galvaan, 2017, p. 55). The adolescents from Groendal were faced with structural limitations due to social and economic contextual factors daily (whether in their own homes or in the lives of the community members around them). Poverty undeniably has a significant effect on a family's ability to provide for children. According to Rybski and Israel (2017, p. 350) the inability to provide for children creates a sense of hopelessness and failure in mothers. Many mothers in the community of Groendal could be experiencing these emotions due to their limited resources in providing for their children. However, another occupational therapy study on the occupation of food provisioning in low income families, showed that mothers from low income families found a sense of pride in planning and providing for their families despite restricted resources (Beagan, Chapman and Power, 2018, p. 109). By meeting the physical needs of the adolescents in their care, immediate families were combatting the effects of structural limitations due to social- and economic contextual factors, in the community of Groendal. Through this action, immediate families were enabling occupational well-being for adolescents.

Lastly, when considering the healthy development of adolescents, immediate families' provision of physical resources also plays an important role. Unmet physiological needs can have a detrimental effect on the development of adolescents. Adolescents who grew up in constrained socio-economic contexts, with poor housing

and limited resources, had been found to have higher incidences of depression and suicidal attempts, poor physical and mental health and poor academic achievements (Harrison, 2010, p. 112; Louw and Louw, 2014, p. 348). Hence, by providing the basic physical resources that adolescents need, immediate families are enabling occupational well-being by preventing developmental delays.

5.2.4. Immediate family providing social support

The fourth reason found in the open-ended questions' results explaining why immediate families were ranked highly in factors 1 and 2 was: because they **provide social support**. The participants verbalised that they felt supported and safe with their immediate family members and that they could share their emotions with them. One quotation will be repeated, but the rest can be revisited in Chapter 4 (cf. 4.4.3.1.d).

“Jou oupas en jou oumas kan jy meestal goed vertel, kan jy luister wat hulle sê.
Your grandfather and grandmother, you can mostly tell them things. You can listen to what they say.” (P100)

Interdisciplinary literature states that emotional support from family members plays an integral role in the development and well-being of adolescents (Kubik *et al.*, 2014, p. 672; Burns *et al.*, 2015, p. 84; Berry and Malek, 2017, p. 51). Occupational therapy literature confirms that emotional support from people (including family members) plays an important role in enabling occupational well-being. This literature will be reviewed in this section.

Firstly, several occupational therapy models point to the importance of social support in people's lives. These models include the Canadian Model of Occupational Performance, which names the social environment (including family members) as an important influencer of occupational participation and engagement (Turpin and Iwama, 2011, p. 118). Furthermore, the PEOP model, is another model that states that social support is one of the environmental factors that enables well-being and quality of life (Christiansen *et al.*, 2011, pp. 96–97). The OTPF (though a framework and not a formal model in occupational therapy) also confirms the importance of the support from social environmental resources in enabling engagement, participation

and health (American Occupational Therapy Association, 2014, p. S4). These models and framework confirm why the emotional and social support that participants received from their immediate families enabled occupational well-being.

Secondly, the role of the occupational need for *companionship* in enabling occupational well-being, described by Doble and Santha (2008, p. 187) is confirmed here. They described that people felt less isolated and lonely when their occupational need for companionship was met. Furthermore, people felt a sense of belonging and intimacy through these occupations (Doble and Santha, 2008, p. 187). It seems that engaging with immediate family members on an emotional level satisfied the adolescents in this study's occupational need for companionship, which enabled occupational well-being. Furthermore, the adolescents' fundamental human need for affection, as described by Max-Neef, was also met when immediate families provided them with social and emotional support (Max-Neef, 2008, p. 2). Thus, immediate families' social support, satisfy adolescent's' fundamental- and occupational needs for affirmation and affection, thereby enabling occupational well-being.

Lastly, the participants' need for *belonging* seems to be revealed in this section. Hammell described one aspect of belonging as 'the experience of a safe haven' (Hammell, 2015a, p. 44). She stated that people had a need to belong to a place where they feel safe and part of a caring community of people who accepted them (Hammell, 2015a, p. 44). By listening to and supporting adolescents, immediate families create a safe place where the adolescents experience a sense of belonging, which contributes greatly to occupational well-being.

However, Rybski and Israel's study found, from an occupational therapy perspective, that poverty had a significant effect on the quality of parenting provided specifically by mothers (Rybski and Israel, 2017, p. 349). They found that the challenges accompanying poverty, such as homelessness, un/under-employment and poor mental health could undermine a mother's capacity to care for and emotionally engage with her children (Rybski and Israel, 2017, p. 349). Hence, it could be assumed that the social- and emotional support provided by immediate families could be inhibited in contexts with limited socio-economic resources. However, these findings were not supported by this current study, as the participants experienced the

social support from immediate families as enabling to occupational well-being, despite the challenging socio-economic circumstances that many families in the community faced. Yet, the findings of this study do not render the existing literature irrelevant.

5.2.5. Final observations

Three additional observations were noted during the interpretation of the above-mentioned results. These observations will be discussed and then a short summary of this category will be provided.

Firstly, an observation was made while interpreting the data that most of the reasons explaining why immediate families enabled occupational well-being, seemed to not primarily revolve around the companionship provided by family members, but rather showed how the immediate families satisfied the adolescents' personal needs. This seemed to contradict the assumed collectivist culture within this community which supposedly placed more emphasis on collective occupations and needs than on individual needs. (Hammell, 2009, p. 110; Ramugondo and Kronenberg, 2015, p. 9). This could, however, point to the developmental stage, considering that adolescence is known as a life stage characterised by egocentric behaviour (Hanna, 2017, p. 30; Valizadeh *et al.*, 2018, p. 29).

Secondly, another observation in terms of the social environmental factors enabling occupational well-being, was that friends and neighbours were not seen as enablers to occupational well-being by most of the participants. Actually, in factor 1 and in the open-ended questions both friends and neighbours came out as barriers to occupational well-being rather than enablers (cf. 4.3.2.2 and 4.4.4.2). This was noted for two reasons. Firstly, again in the light of the presumed collectivist culture and Ubuntu worldview of this community, one would expect *neighbours* to play a supporting role in the lives of adolescents (Ramugondo and Kronenberg, 2015, p. 9; Makiwane, Gumede, Mokoae, and Vawda, 2017, p. 49). However, the results illustrated that neighbours frequently served as barriers to occupational well-being due to untrustworthiness and contribution to occupational restrictions through risk-behaviour such as alcohol abuse (cf.4.4.4.2.b). A study done in Port Elizabeth, South Africa, confirmed that the social support that children in child-headed households

received from neighbours and community members was inconsistent and ambiguous according to the children in those households (Van Dijk and Van Driel, 2012, p. 283). Secondly, the participants' views of their *friends'* roles in enabling occupational well-being were also noted, especially in the light of their developmental stage. It is assumed that adolescents start attaching more to friends and other people outside of the immediate family in this life stage (Berry and Malek, 2017, p. 53). However, the results of this study did not confirm this assumption. Rather, the results showed that adolescents in the study (especially those from factor 1) mostly viewed their friends as barriers to occupational well-being since they felt pressured by friends to make occupational choices that contradicted their values (cf. 4.4.4.2.a). This finding is supported by literature pointing to the correlation between peer pressure and adolescent risk behaviour in communities facing socio-economic challenges (Song, Smiler, Wagoner and Wolfson, 2012, p. 96; Hendricks, Savahl and Florence, 2015, p. 99). The participants from this study showed insight into the negative role that friends could have on occupational well-being, if friends negatively influenced occupational choices.

The third observation from this category was the different views of the enabling role of fathers on occupational well-being. Even though factor 1 showed fathers as enablers to occupational well-being (4.3.2.2), factor 2's participants placed fathers significantly lower down on the answer sheet, under +1 (cf.4.3.3.2). Furthermore, in the open-ended questions' results, some participants distinctly indicated the physical or emotional absence of their fathers as a barrier to occupational well-being. The following quote illustrates this view. See Chapter 4 (cf.4.4.4.2.c) for other verbatims regarding this code

"En my pa, hy gee nie om vir my nie. *And my dad, he doesn't care about me.*"
 (P047)

This observation confirms the phenomenon of absent fathers that is a reality in many South African homes. Statistics show that more than 50% of South African children do not live with their fathers (Hall and Sambu, 2017, p. 101). The physical or emotional absence of fathers have a significant effect on the well-being and identity formation of adolescents in South Africa (Davids, Sekor, Roman, and Leach, 2016,

p. 272; Jamieson and Richter, 2017, p. 33; Radebe, 2017, p. 8). Furthermore, fatherlessness contributes to the prevalence of risk taking behaviour in adolescents in South Africa (Idemudia, Maepa and Moamogwe, 2016, p. 6846). This study confirmed that some adolescents in the Groendal community experienced their fathers as distant and they experienced this as a barrier to occupational well-being.

In summary, the aim of this study was to describe which physical- and social environmental factors adolescents living in Groendal, viewed as enabling to their occupational well-being. In this section, immediate families were identified as an important enabler to occupational well-being of adolescents in the Groendal community. This was established through interpreting the factor array of factor 1, where 'Mothers', 'Fathers', 'Grandparents', and 'Siblings' were all ranked from +2 to +4 on the factor array, indicating that they highly enabled occupational well-being according to the participants (cf. 4.3.2.2). In the factor array for factor 2, 'Mothers' was placed under +3, also indicating that they highly enabled occupational well-being (cf. 4.3.3.2). Thereafter, the results from the open-ended questions were interpreted to gain a deeper understanding of *why the* participants viewed their families as enabler to occupational well-being (cf. 4.4.3.1). In terms of the young olive tree analogy (cf. 1.1), immediate families were identified as a support beam which kept the young trees upright despite the challenging weather conditions. The reasons why the olive trees experienced their immediate families as a support beam, was because they contributed to the forming of moral values, provided educational opportunities, met physical needs and provided social support. The gathering of this information contributed to meeting objective three of this study which was: to describe adolescents in Groendal's subjective viewpoints on which environmental factors enabled their occupational well-being.

In the following section, the second environmental factor that enabled occupational well-being for adolescents in Groendal will be described.

5.3. EDUCATIONAL RESOURCES ENABLING OCCUPATIONAL WELL-BEING

The second environmental factor that participants of this study viewed as enabling to occupational well-being was **educational resources**. This was determined after

holistically analysing the quantitative and qualitative data from this study. Firstly, in the factor array for factor 1 the Q cards ‘School’ and ‘Teachers’ were placed under +4 and +3 on the answer sheet, meaning that they highly enabled occupational well-being according to participants (cf. 4.3.2.2). Secondly, in the open-ended question, education’s role in occupational well-being was mentioned regularly and it was therefore one of the categories described under theme 1 (cf.4.4.3.2). Through this discussion, the research question is further answered by providing a deeper understanding of which physical and social environmental factors adolescents in Groendal viewed as enabling to their occupational well-being.

Education’s role in combatting poverty and enabling well-being of young people is acknowledged in many disciplines (Republic of South Africa, 1996, p. 12; Western Cape Government, 2013, pp. 41–45; Kubik *et al.*, 2014, p. 672; Berry and Malek, 2017, p. 53; Jamieson and Richter, 2017, pp. 35, 38; World Health Organization, 2017, p. xviii). However, in this section, the reasons *why* adolescents from Groendal viewed educational resources as enabling to occupational well-being were explored. This provides a deeper understanding beyond the mere fact that education enables well-being.

As mentioned in Chapter 4 (cf. 4.4.3.2), three main reasons were described by participants to explain why educational resources enabled occupational well-being. These three reasons were, because educational resources:

- Provide a better future
- Provide knowledge and
- Provide emotional support

These three reasons will be discussed in the following sections. Once again, in each section reference will be made to the most prominent statements from the open-ended questions to orientate the reader and cross references will be included to revisit the other statements that were mentioned in Chapter 4.

5.3.1. Educational resources providing a better future

Educational resources (school and teachers specifically) were ranked highly on the factor array for factor 1 (cf. 4.3.2.2), indicating that the participants of this study

viewed them as enablers to occupational well-being. The first and most prominent reason extracted from the open-ended question, explaining why the participants viewed educational resources as enabling to their occupational well-being was because they **provided a better future**. For the purposes of this discussion, the statement ‘a better future’ referred to the adolescents’ view that education as a resource could open opportunities for their futures. Furthermore, it represented the participants’ view that educational resources could provide opportunities for their circumstances to improve. The view that educational resources provided a better future was mentioned continually in the open-ended questions’ results. The quotation below illustrates how one participant described the way in which educational resources enabled occupational well-being. The other quotations can be found in Chapter 4 (cf. 4.4.3.2.a).

“En by die skool, ons makeer edukasie, want edukasie is mos die sleutel tot die toekoms. *And at school, we need education, because, education is the key to the future.*” (P003)

Occupational therapy and interdisciplinary literature confirm that access to educational resources can have a positive effect on people’s futures. Firstly, in occupational therapy literature, the MOHO can be referred to, to understand how educational resources provide a sense of hope for the future in adolescents. Through access to educational resources, adolescents are attaining valuable *skills*. The MOHO describes skills as: “discrete purposeful actions” (Forsyth and Kielhofner, 2011, p. 57). These skills that adolescents acquire provide a sense of mastery by empowering them to meet set goals and develop cognitively. Through this process, the adolescents gain an opportunity to develop healthy occupational identities, which provide hope that the future may hold better possibilities than the current contextual realities (Forsyth and Kielhofner, 2011, p. 58). Hence, access to educational resources in the community of Groendal enabled occupational well-being for adolescents by developing healthy occupational identities which created a platform of hope for a better future.

Secondly, Doble and Santha stated that; “when individuals’ occupational experiences generate evidence that confirms who they are and want to become, they will

experience an increased sense of coherence” (Doble and Santha, 2008, p. 187). They argued that *coherence* is one of the occupational needs that must be met for people to experience occupational well-being. The participants from this study seemed to experience coherence through participation in education occupations, since it connected them with what they aspired to become in the future (Doble and Santha, 2008, p. 187). Another occupational need that seems to be satisfied through access to educational resources is ‘*agency*’, which refers to occupations that give people a sense of control over their occupational lives (Doble and Santha, 2008, p. 186). Through utilising educational resources, the adolescents gain a sense of control over their futures which leads to occupational well-being.

Thirdly, from an occupational justice point of view, access to educational resources could provide adolescents from the Groendal community with opportunities that could limit the effects of the occupational deprivation due to limited resources and opportunities. Occupational deprivation occurs when factors outside an individual’s or community’s control hinder them from optimally engaging in occupations that are meaningful to them (Wilcock and Townsend, 2004, p. 81; Durocher *et al.*, 2014, p. 421). Hence, by having had access to educational resources, the adolescents from Groendal’s occupational choices were expanded in terms of opportunities for their futures (Galvaan, 2015, p. 39). This minimises the opportunities for occupational deprivation to occur, which in turn enables occupational well-being.

Furthermore, when considering interdisciplinary literature, access to education has been proven to decrease poverty levels, improve health and longevity and enable well-being of individuals and communities, internationally and in South Africa (Republic of South Africa, 1996, p. 12; Western Cape Government, 2013, pp. 41–45; Kubik *et al.*, 2014, p. 672; Berry and Malek, 2017, p. 53; Jamieson and Richter, 2017, pp. 35, 38; World Health Organization, 2017, p. xviii). Furthermore, education has been identified as one of the ways to break the so-called ‘poverty cycle’ (Burns *et al.*, 2015, p. 83; De Lannoy *et al.*, 2015, p. 25). These factors also contribute to the enabling of occupational well-being.

Unfortunately, the reality is that under-employment in South Africa remains an issue for many people with secondary and even tertiary education (Oluwajodu, Blaauw,

Greyling, and Kleynhans, 2015, p. 1). The hope for a better future that participants of this study portrayed, is characteristic of the 'born-frees' generation who was born after the fall of apartheid (Burns *et al.*, 2015, p. 83; De Lannoy *et al.*, 2015, p. 22). However, many of these young people become disillusioned as they enter the work force and face the realities of limited job opportunities, inequalities and injustices (De Lannoy *et al.*, 2015, p. 22). This is especially true in the South African context, since South Africa has been identified as one of the world's most unequal countries by the World Bank's annual inequality report for 2018 (Alvaredo, Chancel, Piketty, Saez, and Zucman, 2018, p. 145). Hence, the hope that participants in this study placed in educational resources providing them with a better future could unfortunately not be guaranteed in the current South African context. This, however, does not take away from the ability educational resources has to empower, equip and enable well-being for adolescents in our nation.

Thus, through stating that occupational resources provided a better future, the participants of this study showed an awareness that educational resources could provide expanded occupational choices, which could open more possibilities for their futures. This relates to Galvaan's observations of how occupational choices were influenced by the context that they were situated in (Galvaan, 2015, p. 42). In other words, the participants of this study showed a sense of hope in what the future holds. They viewed education as a valuable tool to provide opportunities that could help them break free from the 'poverty cycle'. Whether this hope will be fulfilled or not, is unfortunately uncertain in the current South African context.

5.3.2. Educational resources providing knowledge

The second reason found in the open-ended questions explaining why educational resources were ranked highly in factor 1 (cf. 4.3.2.2) as an enabler to occupational well-being, was because it **provides knowledge**. This reason referred to the transferring of information at schools, through the lessons presented by teachers (one example will be restated, but the other verbatims can be revisited in Chapter 4) (cf. 4.4.3.2.b).

“Okay, daar by die skool, nê, mens leer nuwe baie goed, soos elke dag iets nuuts. En dit expand 'n mens se knowledge van verskillende goeters en knowledge is baie

belangrik. *Okay, there at school, you learn many new things, like everyday something new. And that expands your knowledge about different things and knowledge is very important.*" (P032)

Occupational therapy literature confirms that gaining knowledge together with cognitive development play an important role in people's sense of well-being. Firstly, several models in occupational therapy confirm this. According to the PEOP model in occupational therapy, cognitive development plays a significant role in the occupational performance and participation of people, which influence well-being and quality of life (Christiansen *et al.*, 2011, p. 94). Furthermore, the Canadian Model of Human Occupation lists cognitive developments as an important aspect of a person's functioning which influences well-being (Turpin and Iwama, 2011, p. 118). Thus, these models underscored why gaining cognitive knowledge was viewed by the participants of this study as enabling to occupational well-being.

Secondly, the OTPF lists education as part of the domain of occupational therapy, under the category occupations (American Occupational Therapy Association, 2014, pp. S4, S20). Furthermore, the OTPF states that the development of higher-level cognitive functioning skills forms part of client factors which also play an important role in the functioning and occupational well-being of people (American Occupational Therapy Association, 2014, p. S22). Thus, education and higher-level cognitive development are aspects which contribute to the well-being of individuals, which confirm why participants from this study experienced the gaining of knowledge through educational resources as enabling to their occupational well-being.

Thirdly, the sense of development and progress that adolescents experience through access to educational resources could satisfy adolescents' occupational need for *accomplishment*, as described by Doble and Santha (Doble and Santha, 2008, p. 186). This occupational need is met when people engage in occupations that produce evidence that they are learning, mastering a skill or meeting goals (Doble and Santha, 2008, p. 186). Furthermore, the cognitive development that adolescents receive through access to educational resources also satisfies their fundamental human need for *understanding* as described by Max-Neef (Max-Neef, 2008, pp. 1–2). Hence, through attending school and attaining new knowledge, adolescents' occupational

and fundamental needs for accomplishment and understanding could be met, which could enable occupational well-being.

However, the reality is that the quality of education received by many South African learners is cause for concern (Bhardwaj *et al.*, 2017, p. 29). Less than half of the children in South Africa who started school successfully complete matric (Hall, 2017, p. 124). When considering these realities faced by South African scholars, it seems that the transferring of information and knowledge is not effective for many students in our country. Yet, despite the challenges in the educational system of South Africa, the participants of this study still had a positive view on the knowledge that they acquired at school from their teachers.

5.3.3. Educational resources providing emotional support

The third reason found in the open-ended questions explaining why educational resources ranked highly in factor 1 (cf. 4.3.2.2) as an enabler to occupational well-being, was because it **provides emotional support**. In the open-ended questions, the participants specifically referred to being able to talk to their teachers about things. Hence, in this section emotional support will specifically refer to teachers at school who are emotionally accessible to talk to adolescents and to provide social support. One quotation from a participant will be repeated, but the rest can be revisited in Chapter 4 (cf. 4.4.3.2.c).

“At school I can talk to my teachers.” (P111)

A variety of interdisciplinary and occupational therapy literature confirms that teachers have an important role to play in providing emotional support to adolescents. Firstly, when considering interdisciplinary literature regarding adolescence as a developmental phase, emotional and social support is seen as a crucial aspect of healthy adolescent development (Burns *et al.*, 2015, p. 84; Berry and Malek, 2017, p. 51). During this life phase, the immediate family’s supportive role remains crucial, but other influential people also start playing a bigger role in the adolescents’ development. Teachers are significant role players in the emotional development and support of adolescents (Jamieson and Richter, 2017, p. 34). Hence, through providing

emotional support for adolescents, teachers were contributing to the healthy development of the youth of Groendal, thereby enabling occupational well-being.

When considering occupational therapy literature, the PEOP model and the Canadian Model of Occupational Performance can firstly be utilised to understand how teacher's emotional support could contribute to the occupational well-being of adolescents in Groendal. The PEOP model, names social support as one of the extrinsic (environmental) factors that have an influence on the well-being and quality of life of people (Christiansen *et al.*, 2011, p. 96). Hence, by providing social support to adolescents, teachers in the Groendal community are contributing to their well-being and quality of life according to the PEOP. Furthermore, the Canadian Model of Occupational Performance also states that people's social environments play an important role in their functioning and well-being (Sumsion, Tischler-Draper and Heinicke, 2011, p. 84). Thus, both these models affirm why participants viewed the emotional support from their teachers as enablers to occupational well-being.

Secondly, through talking with teachers, it could be that the adolescents' occupational need for *companionship* is met, which contributes to occupational well-being (Doble and Santha, 2008, p. 187). By providing companionship to the adolescents, the teachers can create a sense of belonging and limit feelings of isolation and loneliness (Doble and Santha, 2008, p. 187). Furthermore, teachers could also be satisfying adolescents' fundamental human need for *affection* by providing them with emotional and social support (Max-Neef, 2008, p. 2). According to Max-Neef, this need was satisfied through experiencing respect and tolerance (amongst others) and when a space was created where togetherness, sharing and expressions of emotions were made possible (Max-Neef, 2008, p. 2). Hence, through providing emotional support to adolescents, teachers in Groendal were satisfying the adolescents' occupational- and fundamental needs for companionship and affection, which enabled occupational well-being.

Thirdly, the teachers from Groendal were enabling occupational well-being in adolescents by creating a sense of belonging. Hammell (2009, p. 110) stated that participating in occupations that foster belonging, connecting and contributing enabled well-being. By providing the adolescents with a safe space to speak, the

teachers were creating a sense of belonging and connectedness which had great potential to enable occupational well-being.

When considering the high prevalence of fragmented families in South Africa, where adolescents move around between family members and often do not live with either of their parents, (Hall and Sambu, 2017, p. 101), the role of teachers in providing emotional support becomes even more important. Especially in communities facing socio-economic challenges, such as Groendal, since this phenomenon is known to be more common in communities with limited socio-economic resources (Hall and Sambu, 2017, p. 101). Furthermore, it is noteworthy that teachers in the Groendal community were creating a safe space for adolescents to talk to them, despite the over-crowded class rooms and difficult teaching circumstances faced by them. Many teachers working in schools within communities have to negotiate occupational and contextual restrictions (Marais, 2016, p. 1)

5.3.4. Final observations

In summary, the adolescents who participated in this study gave three reasons why educational resources enabled their occupational well-being. These reasons were because educational resources provided a better future, knowledge and emotional support.

Additionally, education's importance seemed to thread through many of the discussions of other environmental factors described by the participants. For example, one of the reasons why immediate families were viewed as enablers to occupational well-being, was because they provided educational opportunities and support (cf. 4.4.3.1.b). Furthermore, the importance of education could also be seen in the descriptions of barriers to occupational well-being discussed in Chapter 4. For instance, as seen in the quotations below from Chapter 4 (cf. 4.4.4.1), one of the reasons the participants viewed drugs and cell phones as barriers to occupational well-being, was because they hindered participation in educational related occupations.

“Drugs, drugs, it does not help us, because it damage us, because children leave school because of drugs, some children are smoking at the classroom, then teacher deal with that, but, she did not listen, because he/she is drunk.” (P013)

“The cell phones is just gonna take your mind of your work, like your math and your English.” (P043)

Hence, based on this section, it can be argued that educational resources played a pivotal role in enabling occupational well-being for adolescents living in the Groendal community. Even despite the limitations within the current educational system, adolescents felt empowered and supported by the educational resources within Groendal. The understanding gained through the discussion of this category, contributed to meeting objective three of this study which was: to describe adolescents in Groendal’s subjective viewpoints on which environmental factors enabled their occupational well-being.

5.4. RECREATIONAL RESOURCES ENABLING OCCUPATIONAL WELL-BEING

The third environmental factor that participants described as enabling to their occupational well-being was recreational resources. This environmental factor was a prominent enabler to occupational well-being in factor 2, where sports facilities, cultural festivals and creativity opportunities were all placed under +2 to +4 in the factor array (cf. 4.3.3.2). Furthermore, recreational resources were also frequently elaborated upon by participants in the open-ended questions (cf. 4.4.3.3).

However, the finding that recreational resources enable occupational well-being for adolescents is not new knowledge to the occupational therapy field (Wegner, Caldwell and Smith, 2014, p. 482; Weybright, Caldwell, Ram, Smith, and Wegner, 2015, p. 326; Weybright, Caldwell, Xie, Wegner, and Smith 2017, p. 1). Leisure (an interchangeable term for recreation) is named by the OTPF as one of the occupations needed for a person to be balanced and is described as activities which are engaged in during free time, which are non-obligatory (American Occupational Therapy Association, 2014, p. S21). Furthermore, pleasurable and restorative occupations are two elements that need to be part of a person’s occupational life in order for them to

function optimally (Pierce, 2003, p. 38; Doble and Santha, 2008). Recreational activities can have both pleasurable and restorative qualities, depending on the type of activity. Outside of occupational therapy, the positive impact of recreational possibilities for adolescents is also widely acknowledged (Western Cape Government, 2013, pp. 50–53; Kubik *et al.*, 2014, p. 672; Mmari *et al.*, 2014, p. 128; Burns *et al.*, 2015, pp. 84, 87; Berry and Malek, 2017, p. 53). Hence, the value added by this study's results is that it provides a deeper understanding behind *why* participants viewed this environmental resource as enabling to their occupational well-being.

The two reasons why the participants of this study viewed recreational resources as enablers to their occupational well-being were because they:

- Provided broader occupational choices and
- Provided opportunities for a better future

As in the previous sections, reference will be made to the most prominent quotations and cross references will be provided for the reader to revisit the other verbatims that were mentioned in Chapter 4.

5.4.1. Recreational resources providing broader occupational choices

Recreational resources were ranked highly in the factor array for factor 2 (cf. 4.3.3.2) and was confirmed in the data from the open-ended questions. The first reason provided by adolescents for why recreational resources enabled occupational well-being was because it **provides broader occupational choices**. Specific mention was made that recreational resources prevented adolescents from using drugs and prevented life on the streets. In the open-ended questions' description of barriers to occupational well-being, drugs were also prominent as an environmental factor that caused occupational restrictions in the lives of adolescents from Groendal, hence recreational resources' role in limiting the effects of drug abuse was an important enabler to occupational well-being in this community. A quotation from a participant will be repeated, but the rest can be revisited in Chapter 4 (cf. 4.4.3.3).

“En sport hou my uit die dwelms en goete uit. *And sport keeps me out of the drugs and stuff.*” (P062)

Several occupational therapy literature sources can aid in understanding why participants viewed the broadened occupational choices provided by recreational resources as enabling to occupational well-being. Firstly, when considering “*the contextually situated nature of occupational choice*”, as described by Galvaan (2015, p. 39), the role that available resources within a community play on the occupational choices of people is highlighted. If the context in which adolescents live provides a broad spectrum of occupational choices, then the effects of occupational restrictions are limited (Galvaan, 2015, p. 39). Hence, recreational resources had an important function toward providing alternative occupational choices for adolescents in Groendal. This is especially true in communities with limited resources due to socio-economic constraints, like Groendal, where occupational choices leading to risk taking behaviour were often prevalent. The risk taking behaviours that are most prevalent in communities with socio-economic challenges in the Western Cape include substance abuse, school drop-out, teenage pregnancies and violence (Western Cape Government, 2013, pp. 21, 24). Hence, by making recreation resources available to adolescents in the community of Groendal, the adolescents received alternative occupational choices which limited their engagement in risk taking behaviour.

Secondly, occupational justice literature supports that recreation resources provide broader occupational choices for adolescents, thereby inhibiting participation in risk taking behaviour. Occupational imbalance, a type of occupational risk factor leading to occupational injustice, can occur in communities like Groendal if there is an unhealthy balance between the different occupations that people can engage in (Wilcock and Townsend, 2004, p. 82; Durocher *et al.*, 2014, p. 422). Limited resources due to poverty could lead to occupational imbalance for the adolescents from the Groendal community, since they did not have access to a wide variety of healthy occupations to participate in. However, occupational imbalance can be combatted in the Groendal community by providing a variety of recreational opportunities for adolescents to engage in (Wegner *et al.*, 2014, p. 482; Weybright *et*

al., 2015, p. 326, 2017, p. 1). This broadens the balance of occupational input adolescents receive and therefore makes them less likely to turn to occupations that are unhealthy such as drug abuse due to boredom. This finding is confirmed by Wegner (2011, p. 23). Thus, access to a variety of recreational resources can combat the effects of occupational deprivation, thereby enabling occupational well-being.

Thirdly, adolescents' participation in risk behaviour regularly relates to leisure boredom. This refers to the experience of having a lot of discretionary time, but having limited recreation opportunities to occupy that time (Weybright *et al.*, 2015, p. 312). This phenomenon is particularly prevalent in communities facing socio-economic challenges, due to the limited recreational resources and opportunities that adolescents have access to (Wegner *et al.*, 2014, p. 482; Weybright *et al.*, 2015, p. 324). Hence, by having access to a variety of recreational resources in the community of Groendal, leisure boredom was limited for adolescents. By limiting leisure boredom, occupational well-being was enabled for adolescents.

5.4.2. Recreational resources providing opportunities for a better future

The second reason found in the open-ended questions, explaining why recreational resources enabled occupational well-being according to the factor array of factor 2 (cf. 4.3.3.2) was because they **provide opportunities for a better future**. This reason related to the first reason discussed under why educational resources enabled occupational well-being (cf. 4.4.3.2.a). Recreational resources (especially creativity opportunities, sports facilities and community centres) were viewed by participants as an additional resource that could open possibilities for them to have a better future than their current realities. Participants valued the skills that they learnt at the sports centre, creativity opportunities and community centres, since they felt that these skills could help them attain a better future. One quotation will be repeated and the rest can be revisited in Chapter 4 (cf. 4.4.3.3.b).

“Community centre, where we get what we want to know, it’s where we see our future, where it goes, like if you can play sports like soccer, community centre teaches us to play them.” (P076)

Several occupational therapy sources confirm why adolescents viewed recreational resources as a means through which to obtain a better future. Firstly, the occupational need for *accomplishment* relates to this category (Doble and Santha, 2008, p. 186). At the community centres in Groendal, adolescents were given the opportunity to develop new skills. These skills included playing sports, dancing, singing, acting etc. By mastering these new skills, these centres met the adolescents' occupational need for *accomplishment*, which provided a feeling of mastery and the satisfaction of set expectations (Doble and Santha, 2008, p. 186). This feeling of accomplishment encourages adolescents to dream about the possibilities for their futures. Another occupational need that seems to be satisfied through access to recreational resources is '*agency*', which refers to occupations that give people a sense of control over their occupational lives (Doble and Santha, 2008, p. 186). Utilising recreational resources in the community of Groendal seemed to provide adolescents with a sense of control over their futures which led to occupational well-being. Hence, the recreational resources in Groendal provided adolescents with a sense of mastery which met their occupational needs for accomplishment and agency. This process enabled occupational well-being.

Secondly, the MOHO's description of occupational identity formation relates to the role recreational resources play in providing adolescents with a sense of hope for their futures (Forsyth and Kielhofner, 2011, p. 58). Kielhofner stated that "occupational identity reflects accumulative life experiences that are organised into an understanding of who one has been and a sense of desired and possible direction for one's future" (Forsyth and Kielhofner, 2011, p. 58). Hence, it seems that the experience of mastery that the adolescents attained from utilising the recreational resources in Groendal, provided a sense of direction for their futures. In accordance with this, Max-Neef's fundamental human need for identity was also observed here (Max-Neef, 2008, p. 2). The author stated that the need for identity was satisfied when people experienced a sense of self-esteem and when they got to know themselves (Max-Neef, 2008, p. 2). Hence, through utilising the recreational resources in Groendal, adolescents were gaining self-knowledge regarding their skills and in the process, were developing healthy identities. This identity formation is particularly important in the light of Erikson's description of adolescence as a developmental stage, which primarily revolves around identity vs. confusion (Stephanie, 2005, p. 12;

Louw and Louw, 2014, p. 361). Thus, by facilitating the formation of healthy identities, recreation resources in the community of Groendal were enabling occupational well-being for adolescents.

Thirdly, Wilcock's description of the concept 'becoming' seems to contribute towards understanding why participants viewed recreational resources as a means to provide a better future (Wilcock, 2006, p. 148). She described that: "at every point in their lives, every day, people can either grow or diminish; their 'becoming' can be strengthened, stagnant or sick" (Wilcock, 2006, p. 147). By accessing the recreational resources in their community, the adolescents from Groendal were actively engaging in the process of 'becoming'. These recreational resources provided them with skills that fostered hope that they could live meaningful lives, which strengthened their 'becoming'. This process contributed to occupational well-being.

However, it should be mentioned that when adolescents create vocational dreams built on recreational skills, there is unfortunately a possibility for disillusionment. The vocational possibilities for professional sportsmen and artists are unfortunately quite limited in South Africa. Therefore, adolescents' expectations should be carefully managed by staff and volunteers providing these recreational resources. The adolescents should be made aware that the skills that they are learning are not necessarily primarily vocational, but that they are still learning valuable life skills and integrated skills which they will indirectly be using in the work place one day. This minimises the opportunity for unrealistic future goals and disappointment.

5.4.3. Final observations

In summary, the participants from this study viewed recreational resources as enablers to their occupational well-being because they provided broader occupational choices and opportunities for a better future. Recreational resources that were specifically elaborated on in the open-ended questions as enablers to occupational well-being, were sports facilities, community centres and creativity opportunities.

It was noted that the reasons given by the adolescents for why recreational resources enabled occupational well-being, was not primarily for pleasurable or restorative purposes as traditional literature would assume (Pierce, 2003, p. 38; Doble and Santha, 2008; American Occupational Therapy Association, 2014, p. S21). In this

study, the adolescents found recreational resources enabling to occupational well-being more for reasons relating to productivity and for countering occupational restrictions in their context. This finding concurs somewhat with Hammell, and other authors' argument that the traditional occupational classification should be re-thought for contexts in the global South (Hammell, 2009, p. 107; Motimele and Peters, 2017, p. 1). She suggested that categorising occupations based on the lived experiences of people could be more appropriate in some of these contexts (Hammell, 2009, p. 107). Hence, she suggested the following categories of occupations as more appropriate: "Restorative occupations", "Occupations fostering belonging, connectedness and contributing", "Engaging in doing occupations", and "Occupations reflecting life continuity and hope for the future (Hammell, 2009, pp. 110–112). When considering these alternative classifications of occupations, the access to recreational resources of adolescents in Groendal, enabled much more than mere participation in traditionally categorised 'recreational' occupations. However, these resources rather created opportunities for adolescents to participate in occupations which were restorative, fostered a sense of belonging and contributing, which allowed their experiencing a sense of accomplishment *and* creating opportunities to foster hope for a better future.

Through this section, the adolescents from Groendal's views on why recreational resources enabled occupational well-being were discussed. This further contributed to meeting objective three which was: to describe adolescents in Groendal's subjective viewpoints on which environmental factors enabled their occupational well-being.

In the following section, the final environmental factor that was identified by adolescents in Groendal as enabling to occupational well-being will be discussed.

5.5. BASIC RESOURCES ENABLING OCCUPATIONAL WELL-BEING

The fourth, and final, environmental factor that participants viewed as an enabler to their occupational well-being was basic resources. For the purposes of this discussion the term 'basic resources' specifically refers to access to water, food and health services. This environmental factor did not surface in the open-ended questions,

however, in the factor array for factor 1, food, water and clinic were all placed under +2 as enablers to occupational well-being (cf.4.3.2.2). Therefore, in the light of the specific context where this study took place, which was influenced by the effects of limited resources, it was thought appropriate to add basic resources as a significant enabler to occupational well-being. One quotation from Chapter 4, under the theme “barriers to occupational well-being”, illustrated the adolescents’ awareness of their physiological well-being (cf. 4.4.4.1.a):

“Ek gebruik nie dwelms nie. Dit kan jou liggaam beskadig en ek sien die mense hier by ons plek hou van glue gebruik en dit beskadig jou longe en goed, dan raak jy al hoe maerder. *I don’t use drugs. It can damage your body and I see the people here at our place like to use glue and that damages your lungs and stuff, then you become skinny.*” (P049)

Access to basic resources such as food, water and health care services is a basic constitutional right that all South Africans are entitled to according to section 27(1) of the South African constitution (Republic of South Africa, 1996, p. 11). Across many disciplines the importance of access to basic resources is acknowledged as a vital role player in adolescent well-being (Mmari *et al.*, 2014, p. 131; Harrison, 2017, p. 46; Jamieson and Richter, 2017, p. 37). Maslow’s hierarchy of needs, for example, confirms that meeting the basic physiological needs of people is essential if any higher form of fulfilment is to be reached (Pederson, 2017, p. 3; Aanstoos, 2018). Hence, according to Maslow, by firstly providing in the adolescents’ physical needs, other important needs can also be met, such as love and belonging, esteem and self-actualisation (Pederson, 2017, p. 3; Aanstoos, 2018). Once again, Max-Neef’s description of fundamental human needs can be used to better understand how basic resources enable occupational well-being (Max-Neef, 2008, p. 2). As mentioned earlier, in his description of fundamental human needs, Max-Neef stated that food and water was not a need, but rather a ‘satisfier’ of the need to survive (Max-Neef, 2008, p. 1). Thus, by having access to food, water and health care adolescents’ fundamental need for survival/subsistence is satisfied, which creates a platform for occupational well-being to be enabled (Max-Neef, 2008, p. 1).

From an occupational therapy perspective, the PEOP model confirms that people's physiological needs (including nutrition and health care) play an integral part in reaching well-being and quality of life (Christiansen *et al.*, 2011, p. 96). However, the role that nutrition and healthcare play in contexts where they are not as freely available as in traditional western contexts seems to be ill-described in occupational therapy literature. For example, the OTPF mentions eating and health management as subdivisions of activities of daily living (American Occupational Therapy Association, 2014, p. S19), yet it seems that access to these resources is often assumed within a western/Global North context. In contexts where access to nutrition and health care cannot be taken for granted but is rather something that people do not have consistent access to, the role that it plays in occupational well-being is significantly changed.

Furthermore, access to basic resources greatly influence the occupational choices of people (Galvaan, 2015, p. 39). A lack of access to nutrition and health could severely impact an adolescent's ability to participate in meaningful occupations and could drastically alter the occupational choices that the adolescent viewed as important (since survival would most probably take first priority in determining occupational choices). Hence, once again the contextual nature of occupations is highlighted (Galvaan, 2015, p. 39, 2017, p. 49). In a context where basic resources are not consistently available to all people, the occupational well-being of a community cannot be studied without taking the effect of the availability of these resources into account. Hence, considering Maslow's hierarchy of needs, it would be unwise to consider the occupational well-being of adolescents living in the Groendal community without taking into consideration whether their basic physiological needs are met. Adolescents cannot be expected to live lives that are occupationally just and enable occupational well-being when they lack basic nutrition and health care.

In summary, the participants of this study viewed access to food, water and clinic services as enablers to their occupational well-being, but this did not necessarily mean that these needs were consistently met for all adolescents living in Groendal. This last section emphasised the important role that access to basic resources played in enabling occupational well-being of adolescents living in Groendal, and that the

occupational well-being of adolescents in a community with limited resources, could not be studied without taking access to basic resources into account.

5.6. CONCLUSION

In Chapter 5 the results from this Q study was discussed in the light of relevant literature. Four environmental factors that enabled occupational well-being for adolescents from the Groendal community were discussed. These four environmental factors were: immediate families, educational resources, recreational resources and basic resources. The reasons *why* adolescents described these environmental factors as enablers to occupational well-being were discussed. Through discussing these four environmental factors that enabled occupational well-being according to adolescents in Groendal, the research question was answered. Hence, a deeper understanding was gained regarding which physical- and social environmental factors enabled occupational well-being of adolescents in the Groendal community.

In summary, few theoretical underpinnings were prominent throughout the discussions of the four environmental factors' roles in enabling occupational well-being for adolescents in Groendal. These theoretical underpinnings included:

- The important influence that adolescents' *contexts* have on the *occupational choices* they make (Galvaan, 2015, p. 39). Access to (or absence of) resources within the context of Groendal, including educational resources, immediate family support, recreational resources and physical resources, played an integral role in the occupational choices available to adolescents in Groendal. This directly affected the occupational well-being of adolescents in this community.
- The opportunity created by environmental factors for adolescents from Groendal's *occupational needs* to be met. The specific occupational needs that frequently emerged were the needs for accomplishment, agency, companionship and coherence (Doble and Santha, 2008, pp. 186–187),
- The important role of *identity formation* in adolescence as a life stage and how environmental factors in Groendal contributed to this process (Stephanie, 2005, p. 12; Louw and Louw, 2014, p. 361). Specific attention was also given

to the formation of *occupational identities* in adolescents and how utilising the resources in their context contributed to healthy occupational identities (Forsyth and Kielhofner, 2011, p. 58).

- The potential of environmental factors in Groendal to meet the *fundamental human needs* of adolescents, as described by Max-Neef (Max-Neef, 2008, p. 2). The specific fundamental needs that seemed to be satisfied by the discussed environmental factors in this study were the needs for subsistence, affection, understanding and identity (Max-Neef, 2008, p. 2)

In the light of the olive tree analogy (cf. 1.1), Chapter 5 provided a deeper understanding into how the young trees (adolescents living in Groendal) viewed the support beams around them, which protected them from harsh weather



FIGURE 23: VISUAL PRESENTATION OF ENVIRONMENTAL FACTORS ENABLING OCCUPATIONAL WELL-BEING OF ADOLESCENTS IN GROENDAL

circumstances. We were given a glance at how the young trees experienced the resources around them and which resources they viewed as truly supportive. Through this understanding we gained a deeper insight into *why* the young trees experienced certain support beams as more supportive than others. In essence, the four support beams that were identified by the young trees as enablers to growth and well-being were immediate families, educational resources, recreational resources and basic resources (see figure 23).

In the following, and final chapter, Chapter 6, the conclusion, recommendations and closure for this dissertation will be presented.

CHAPTER 6

Conclusion

6.1. INTRODUCTION

Adolescents living in the community of Groendal have the constitutional right to live in “*an environment that is not harmful to their health or wellbeing*” (Republic of South Africa, 1996, p. 9). In response to this basic constitutional right, in this dissertation, environmental factors that the adolescents from Groendal viewed as enablers to their occupational well-being were investigated and discussed. This was done based on the community-built practice approach, which emphasised the need for a strengths based approach when occupational therapists engaged in community development (Doll, 2010, p. 13), rather than over-emphasising the occupational restrictions within a community.

In this study, the adolescents’ own *subjective* viewpoints on environmental factors enabling their occupational well-being were described by utilising Q Methodology. Q methodology is a mixed methods study design, which specifically enables researchers to study the subjective viewpoints of participants. This study provided a better understanding of the way adolescents viewed their environment and provided a glimpse on their lived occupational experiences in their community.

The problem that motivated this study included four main concepts, namely: 1) communities with limited resources in South Africa and the Western Cape, 2) adolescents living in communities with limited occupational possibilities, 3) limited resources causing occupational injustices which threaten occupational well-being of adolescents and 4) limited evidence of effectivity of environmental resources in the community of Groendal. In summary, the main problem that was identified was that: despite the known realities of occupational restrictions facing adolescents in the community of Groendal due to limited resources, no contextually situated information was found about environmental factors that the adolescents viewed as *enabling* to their occupational well-being.

In the previous chapters of this dissertation, the introduction, literature review, methodology, results and discussions were presented, in response to the above-mentioned research problem. In this chapter, Chapter 6, the research question will

be answered and the implications of the study will be presented as the dissertation is concluded. The implications will be described in terms of recommendations for practice and future research. Lastly, the limitations and the value of the study will be discussed.

6.2. ANSWERING THE RESEARCH QUESTION

As a reminder, the **aim** of this study was to describe which physical- and social environmental factors adolescents living in Groendal viewed as enabling to their occupational well-being. The **objectives** for the study were:

1. To identify physical environmental factors that are available to adolescents in Groendal
2. To identify social environmental factors that are available to adolescents in Groendal
3. To describe adolescents in Groendal's subjective viewpoints on which environmental factors enable their occupational well-being

Objectives 1 and 2 first needed to be met in order to create the Q set which was used during the data gathering phase in the form of Q sorting. Thereafter, objective 3 was met through interpreting the data from the Q sorts and open-ended question. Each objective's outcome will be described in this section to show how they were met through the study.

In the light of the analogy describing this study, of young olive trees planted in difficult circumstances with support beams around them to keep them upright, the three objectives were necessary to determine which support beams the adolescents (young trees) viewed as supportive in their environment. Objectives 1 and 2 identified all the major physical- and social environmental support beams that adolescents in Groendal had access to that could possibly enable occupational well-being (fruit bearing). Objective 3 then gave the adolescents an opportunity to point out which of these resources they experienced as enabling to their occupational well-being. In other words, we gained understating of which support beams the young trees viewed as meaningful support to enable optimal fruit bearing and growth.

6.2.1. Objective 1: Identify physical environmental factors that are available to adolescents in Groendal

As mentioned in Chapter 3 (cf. 3.3.1.4), a Q set with 39 Q cards was generated at the beginning of this study. These 39 Q cards represented physical- and social environmental factors that were available to adolescents living in the Groendal community and were compiled by consulting literature and a semi-structured group interview with community members. Twenty of these cards represented physical environmental factors in the community of Groendal which are accessible to adolescents. The 20 physical environmental factors that were identified can be seen in Table 13.

TABLE 13: PHYSICAL ENVIRONMENTAL RESOURCES IN GROENDAL

Physical environmental factors in Groendal	Category from ICF-CY
1. Food 2. Clinic 3. Fresh water 4. Drugs (alcohol, drugs, tik, glue)	Products for personal consumption
5. Clothes 6. Furniture and electric appliances 6. Cleaning products	Products and technology for personal use in daily living
8. Cell phones 9. Internet access 10. Computers 11. Televisions	Products and technology for communication
12. School 13. Library	Products and technology for education
14. Sports facilities 15. Community centre 16. Cultural festivals (eg. Karnavaal or rasta festival) 17. Creativity opportunities (Choir, dance group, music lessons, poetry and drama classes) 18. Weekend sporting events	Products and technology for culture, recreation and sport
19. Faith institutions 20. Faith youth meetings	Products and technology for practice of religion or spirituality

By identifying these 20 physical environmental resources that were available to adolescents in Groendal, objective 1 was met.

6.2.2. Objective 2: Identify social environmental factors that are available to adolescents in Groendal

Objective two was met through the identification of the 19 social environmental factors that were available to adolescents in Groendal. They were also identified through consulting literature and through a semi-structured group interview with community members. The 19 social environmental factors that were identified are presented in Table 14.

TABLE 14: SOCIAL ENVIRONMENTAL RESOURCES IN GROENDAL

Social environmental factors in Groendal	Category from ICF-CY
21. Mother 22. Father 23. Brothers and sisters 24. Foster/ adoptive parents 25. Grandparents	Immediate Family
26. Aunts and Uncles 27. Nephews and Nieces	Extended Family
28. Friends	Friends
29. Peer group 30. Neighbours	Acquaintances, peers, colleagues, neighbours and community members
31. Church leaders 32. Municipal counsellors 33. Social Workers 34. Police 35. Teachers 36. Headmaster of School	People in positions of authority
37. Pets	Domesticated animals
38. Psychologists and counsellors 39. Staff at community centres	Other professionals

By identifying these 19 social environmental resources that were available to adolescents in Groendal, objective 2 was met.

6.2.3. Objective 3: Describe adolescents in Groendal's subjective viewpoints on which environmental factors enable their occupational well-being

Objective 3 was met through interpreting the quantitative and qualitative data that was collected by means of Q methodology. Chapter 5 provided an in-depth discussion of the significance of the results in the light of relevant literature. In summary, four main environmental factors were identified by adolescents from Groendal as enablers to their occupational well-being. These four enablers were: 1) Immediate families, 2) Educational resources, 3) Recreational resources and 4) Basic resources. Beyond identifying these four environmental factors as enablers to occupational well-being, this study also provided additional depth into the reasons why adolescents viewed these four environmental factors as enablers to their occupational well-being (see Table 15). These reasons were mainly extracted from the adolescents' answers to the open-ended questions that they were asked after the Q sorting process.

TABLE 15: ENVIRONMENTAL FACTORS ENABLING OCCUPATIONAL WELL-BEING OF ADOLESCENTS IN GROENDAL AND REASONS WHY

Environmental factors enabling occupational well-being	Reasons why
1. Immediate families	a. Contributing to forming moral values b. Providing educational opportunities c. Meeting physical needs d. Providing social support
2. Educational resources	a. Providing a better future b. Providing knowledge c. Providing emotional support
3. Recreational resources	a. Providing broader occupational choices b. Providing opportunities for a better future
4. Basic resources	a. Form baseline for occupational well-being to be possible

A few main theoretical underpinnings continually emerged while studying these four environmental enablers to occupational well-being and the reasons why they were

viewed as such. Firstly, the important influence that adolescents' *contexts* had on their *occupational choices* was a prominent theme throughout the interpretation process of the data (Galvaan, 2015, p. 39). This specifically translated to the resources that were available to adolescents in the Groendal community and how these resources influenced the occupational choices available to those adolescents.

Secondly, throughout the interpretation and discussion of the results, it was observed that access to these four enabling environmental factors, contributed to meeting certain *occupational needs* of adolescents in Groendal. The occupational needs, as described by Doble and Santha, that were particularly prominent throughout the discussion were the needs for accomplishment, agency, companionship and coherence (Doble and Santha, 2008, pp. 186–187). The access of adolescents to the enabling environmental factors, satisfied these occupational needs, which according to Doble and Santha had a positive effect on occupational well-being (Doble and Santha, 2008, p. 186).

Thirdly, another theoretical underpinning explaining why these environmental factors enabled occupational well-being, was because they contributed to the process of *identity formation* in the adolescents. This is particularly important in the light of adolescence as a life stage, since in this developmental stage identity versus confusion develops (Stephanie, 2005, p. 12; Louw and Louw, 2014, p. 361). Furthermore, the environmental resources also seemed to contribute to the formation of *occupational identities* in adolescents and how utilising the resources in their context contributed to healthy occupational identities (Forsyth and Kielhofner, 2011, p. 58).

Fourthly, the four identified environmental factors were found to enable occupational well-being by meeting the *fundamental human needs* of adolescents in Groendal, as described by Max-Neef (Max-Neef, 2008, p. 2). The specific fundamental needs that they seemed to satisfy were the needs for subsistence, affection, understanding and identity (Max-Neef, 2008, p. 2).

Hence, objective 3 was met through this study by describing the adolescents from Groendal's subjective viewpoints on which environmental factors enabled their occupational well-being.

6.3. IMPLICATIONS OF THE RESEARCH

The findings of this study have certain implications for practice and future research in occupational therapy. In this section, the implications of the research will be discussed to show how the findings can be utilised in the community of Groendal and in occupational therapy research and theory.

6.3.1. Recommendations for practice

The findings of this study pointed out that there were four main environmental factors that adolescents in Groendal viewed as enablers to occupational well-being. These four environmental factors were: 1) immediate families, 2) educational resources, 3) recreational resources and 4) basic resources. These findings can be utilised in a community-built practice approach to further promote occupational well-being of adolescents in the Groendal community. In order for the recommendations to stay true to the community-built practice approach, certain principles need to be incorporated (Doll, 2010, p. 13). The recommendations for practice will be discussed below, firstly in the light of community-built practice principles and then more specifically in terms of the findings of this specific study.

6.3.1.1. Recommendations based on community-build practice

Firstly, in community-built practice, the community's strengths need to be evaluated and acknowledged. This provides a platform for health promotion and enabling occupational well-being (Doll, 2010, p. 13; Galvaan and Peters, 2017, p. 177). Through this study, some of the prominent strengths within the community of Groendal, which enabled occupational well-being for adolescents were identified. However, there are still many undiscovered strengths within the community that need to be appraised. These strengths can be discovered in collaboration with community members, who can further voice their views on the matter, it can also be done by community immersion (where the therapist positions herself within the community for a prolonged time and observes the inherent strengths within the community) (Doll, 2010, pp. 19–20).

Secondly, if effective community-built practice intervention is to be implemented based on the findings of this study, the community members of Groendal need to buy

in as 'equal partners' in the program development, implementation and evaluation (Doll, 2010, p. 13; Galvaan and Peters, 2017, p. 175). In terms of implementing programs to enable occupational well-being of adolescents from Groendal, a variety of community members need to be involved in the planning, implementation and evaluation of any such programs. Leaders in the community, immediate family members, youth care workers, teachers and adolescents themselves need to be involved in the discussion around what is needed in the community and how the adolescents of Groendal's occupational well-being can be enabled in a sustainable and culturally sensitive manner. The findings of this study already provided a point of departure for this process, since the adolescents' views on enablers to occupation well-being had been explored through this study.

Thirdly, if any programs are to be implemented to enable occupational well-being of adolescents in Groendal, the community members need to take full ownership of such programs (Doll, 2010, p. 14; Galvaan and Peters, 2017, p. 175). The programs should not be dependent upon the leadership or vision of the occupational therapist, or any other outsiders or professionals, but rather be run by the community members themselves (Doll, 2010, p. 14). In the light of the specific findings of this study, it would be wise to allow immediate family members of adolescents and teachers who work with adolescents to lead parts of the programs that are initiated. The immediate families will have specific concerns and ideas about how occupational well-being can be enabled for their children, and teachers could also provide meaningful insights into this matter. The findings of this study suggest that the adolescents will value the input from immediate families and teachers, since they were identified as important enablers to occupational well-being by the participants.

The fourth recommendation for practice, based on the findings and on community-built practice guidelines, is that the therapist (the researcher in this case) needs to continually grow in cultural sensitivity and humility if successful implementation of any program is to be attained (Doll, 2010, p. 14; Galvaan and Peters, 2017, p. 185). A 'cultural humility' approach encourages health care workers within culturally diverse settings to be humble enough to allow the clients to tell their own stories and to learn from clients as they learn from us, (Beagan, 2015, p. 277). This is an essential recommendation for practice, based on the findings of this study. Any future

engagement in the community of Groendal by occupational therapists or other professionals needs to be approached with humility and teach-ability, acknowledging that the community members are the experts on the occupational realities of living in Groendal. This will also require a willingness to engage in community immersion (Doll, 2010, pp. 19–20) through which the therapist will better recognise the rhythm and structures of the Groendal community. This will add authenticity to any involvement in the enabling of occupational well-being of adolescents in Groendal.

6.3.1.2. Recommendations based on findings

Based on the four environmental enablers to occupational well-being identified through this study (immediate families, educational resources, recreational resources and basic resources), the following recommendations are suggested to further enable occupational well-being of adolescents in Groendal through occupational therapy:

Immediate family: It is recommended that programs be designed and implemented to support immediate families in caring for adolescents in the community of Groendal. This could relieve the burden of care that immediate families possibly experience, and it could create a support network for families to learn from and encourage each other. It is recommended that the immediate families of adolescents in Groendal partner in the development of such programs to ensure authenticity and applicability. Organising monthly discussion groups where immediate family members of adolescents can partner in creating a support program and share their challenges and victories in terms of supporting adolescents in the community is recommended.

Education: It is recommended that programs be designed and implemented to support teachers in the governmental schools in and around Groendal. This is recommended because the teachers in these schools face numerous challenges due to limited resources, violence in schools, school drop-out, limit governmental support etc. By supporting the teachers better, they can possibly be more equipped to enable occupational well-being of adolescents. It is recommended that the teachers from the governmental schools in and around Groendal partner in the development of these programs to ensure authenticity and applicability. Monthly meetings with teachers from the schools in and around Groendal, to get their input on ways to better support and strengthen teachers in their task of enabling occupational well-being for

adolescents is recommended as a point of departure. Furthermore, it is recommended that meetings should be scheduled with students from secondary schools in Groendal to partner with them in creating programs that can support them academically.

Recreation: It is recommended that the occupational therapist partners with adolescents from Groendal to expand the recreational opportunities that are available to them. Adolescents need to be consulted in terms of which recreational needs they experience and how they want those needs to be met. Advocacy for funding and better opportunities will be needed from the occupational therapist.

Basic sources: Since not all adolescence in Groednal have consistent access to basic resources, it is recommended that the occupational therapist takes on the role of advocate in the community of Groendal to ensure that adolescents' basic needs are met. However, this cannot be done without the input and commitment of leaders in the Groendal community. Meetings with these leaders (including headmasters, municipal counsellor, police, social workers and church leaders) need to be scheduled to discuss responsible ways to make basic resources available to adolescents in Groendal.

6.3.2. Recommendations for future research

The findings of this study provide opportunity for further research in several areas regarding enabling occupational well-being of adolescents in the Groendal community. The recommendations for future research will be discussed based on the four main concepts that this study was built upon, which were identified in Chapter 1 (cf. 1.1). All four these areas still have scope for further research. The four concepts were: 1) communities with limited resources (specifically the community of Groendal), 2) adolescents, 3) occupational well-being and 4) environmental factors. All four these concepts were described in the olive tree analogy in Chapter 1 (cf. 1.1).

Firstly, when considering the specific context of the community of Groendal, scope for further research exists in a few areas. The following research questions can be studied from a community-built practice frame of reference when considering the context of the Groendal community:

- Which occupational possibilities do community members of Groendal identify as potential enablers to economic change?
- What are community members' views on vocational skills development programs as a means to facilitate economic change within the community of Groendal?

Secondly, when specifically considering the adolescents living in the community of Groendal, a few research questions also arise:

- How does the context of Groendal influence the occupational choices and possibilities that adolescents in Groendal have access to?
- What are the occupational profiles of adolescents living in the Groendal community?

Thirdly, specific research questions can be asked concerning the occupational well-being of adolescents in the Groendal community. In this section, more attention could be diverted to the barriers to occupational well-being, that were touched upon in this study, but were not discussed in depth. The research questions that could be asked regarding occupational well-being, include:

- How can the effects of barriers to occupational well-being be limited according to adolescents in the Groendal community?
- How do adolescents living in the Groendal community perceive their level of occupational well-being?
- Which strategies do community members, professionals, youth workers and adolescents identify as possible enablers to occupational well-being of adolescents living in Groendal?

Lastly, this study identified four main environmental factors that adolescents in Groendal viewed as enablers to occupational well-being namely: immediate families, educational resources, recreational resources and basic resources. Further research needs to be done in order to utilise these environmental resources effectively to optimally enable occupational well-being for adolescents in Groendal. Research questions that could aid in this process include:

- What support does immediate families in Groendal need to optimise their role as enablers to occupational well-being of adolescents in Groendal?
- What occupational restrictions inhibit immediate families from optimally enabling occupational well-being of adolescents in Groendal and how can it be addressed?
- What support does teachers in Groendal need to optimise their role as enablers to occupational well-being of adolescents in Groendal?
- Which occupational possibilities could be offered to adolescents from Groendal which would enable occupational well-being according to teachers?
- How can recreational resources in the community of Groendal be utilised to prepare adolescents for the open-labour market?
- What are the effects of insufficient access to basic resources (nutrition and health care) on the occupational choices of adolescents in the community of Groendal?
- Which resources in the community of Groendal can be utilised, to enable adolescents to contribute to combatting the insufficient access to basic resources in Groendal?

6.4. LIMITATIONS OF THE STUDY

The first limitation to this study was that recruiting participants took more time than initially expected. The researcher spent 90 hours in the community of Groendal during the data gathering phase. However, many of these hours were spent waiting for potential participants to return consent forms. Yet, spending this time in the community was by no means meaningless. It served as a type of community immersion, which allowed the researcher to gain a deeper understanding of the rhythms of the occupational lives of residents in the Groendal community. Community immersion is an important aspect of community-built practice (Doll, 2010, pp. 19–20), hence the time spent in the community added value to this study.

The second limitation of the study was that many of the participants struggled to understand certain Q cards. This was evident when the researcher read through the cards with the participants; many participants asked what these particular cards meant. These cards were verbally explained to the participants and they were able to

ask questions if they wanted to clarify the meanings of the words throughout the Q sorting process. Yet, having to explain these cards to most of the participants prolonged the Q sorting process, and it can be argued that the adolescents were less likely to pick those cards as enablers or barriers to occupational well-being, since they did not know the meaning of the words. Those specific cards that had to be regularly explained to participants were: **Afrikaans Cards:** Geloofsinstansies, Portuurgroep, Jeug geloofs byeenkomste, sielkundiges en beraders and **English Cards:** Faith institutions, Nephews and Nieces, Peer group, Psychologists and counsellors, Municipal counsellor.

The third limitation of the study was that certain environmental factors were not included in the Q set, that could have added valuable data to the study. The Q set was compiled by consulting literature and by conducting a semi-structured group interview with community members from Groendal (cf. 3.3.1). The environmental factors that, in hindsight, could have added interesting data to the study were based on the researcher's clinical experience and not mentioned in the literature or semi-structured interviews. The three cards that could have been added to the Q set were: Transport (taxis, bicycles etc), girlfriends/boyfriends and step-parents. However, the concourse that was generated was too large and a decision needed to be made about a Q set that would most likely concur with the research objectives. Furthermore, an oversized Q set would lengthen the Q sorting process and would most likely challenge the participants' concentration spans.

The last limitation of the study was that many of the participants' reading abilities influenced their ability to understand the words printed on the Q cards. The researcher had to read through all the cards with most of the participants and many cards had to be explained. For the participants whose home language was not English or Afrikaans, this could contribute to this observation. However, many of the participants had Afrikaans or English as their home languages and yet they struggled to read the cards. The words that the participants struggled to read were, for example, 'neighbours', 'community centres', 'creativity opportunities'. Once, the words were read to the participants, it was clear that they understood the concepts, since they could give examples or elaborate on the meaning of the term if asked, hence the main problem was just reading the words themselves. However, the participants' reading

abilities did not hinder the participants' ability to understand the instructions and to participate in the study, since they were continually reminded of the meanings of words and they were able to ask questions at any time during the Q sorting process.

6.5. VALUE OF THE STUDY

The primary value of this study was that it provided a deeper understanding into adolescents living in Groendal's views on which environmental factors enabled occupational well-being. This information is valuable, since it provides a point of departure for community-built practice intervention in the community of Groendal, which has had limited occupational therapy involvement up to date. The information is strength-based, which aligns with the community-built-practice approach. The four environmental factors which adolescents viewed as enablers to occupational well-being (immediate families, educational resources, recreational resources and basic resources) can now be recognised and better utilised in the process of enabling occupational well-being of adolescents in Groendal. This information is valuable from an occupational therapy point of view, as well as for the fieldworkers, potential donors and policy makers who are involved in the community of Groendal.

Secondly, the results of this study added to the body of knowledge in occupational therapy regarding the occupational well-being of adolescents living in communities with limited resources in South Africa. Since the amount of occupational therapy research in this area is limited, this study contributed to the profession's understanding of how contextual factors can influence the occupational choices of adolescents in under-resources communities in the South African context.

Thirdly, this study provided a point of departure for future research regarding the occupational well-being of adolescents in the community of Groendal, especially in terms of community-built practice interventions. For authentic and effective community development to be implemented in the community of Groendal, much more research is needed to better understand the needs and strengths of the community. Hence, this study serves as a point of departure towards a deeper understanding of the occupational needs of adolescents living in the Groendal community. Furthermore, the results can contribute to fieldworkers and policy makers' understanding of the needs of adolescents in the Groendal community.

Lastly, the study gave an opportunity to adolescents from the Groendal community to speak up for themselves. A platform was made available for adolescents to voice their occupational experiences within the Groendal community.

6.6. FINAL REFLECTIONS AND CLOSURE

This research study met the aim and objectives that it set out to meet. The main problem, namely *‘that despite the known realities of occupational restrictions facing adolescents in the community of Groendal due to limited resources, no contextually situated information was found about environmental factors that the adolescents view as enabling to their occupational well-being’*, was also addressed. This study serves as a point of departure for community-built intervention in the community of Groendal which is strengths-based and in collaboration with the community members.

Q methodology was found to be an effective research methodology for answering the research question. Participants responded very well to the instructions and methodology. Furthermore, the generating of quantitative and qualitative data was also very helpful in gaining a deeper understanding of the participants’ subjective views. Q methodology is recommended as an effective study design in occupational therapy research.

Throughout this research process, the researcher was motivated not to overemphasise the occupational restrictions in the community of Groendal, but rather to illuminate the strengths that lie within the community. This process has been one of continual awareness and laying down of inherent colonial ways of thinking when approaching communities and cultures different to one’s own. It has aided the researcher’s process of growing in cultural humility.

In closing, Robert D. Lupton’s words echo what this study aimed to achieve: *“The poor, no matter how destitute, have enormous untapped capacity, find it, be inspired by it, build upon it”* (Lupton, 2011, p. 191).

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APPENDIX A: GROUP INTERVIEW DEMOGRAPHICAL INFORMATION



GROUP INTERVIEW demographical information

Instructions	For Office Use																								
<p>Please mark the appropriate block with an X or write your answer on the space provided.</p> <p>1 Date questionnaire is completed (dd/mm/yy)/...../.....</p>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 1 – 3 </div>																								
<p>2 What is your gender?</p> <div style="display: flex; justify-content: space-around; margin-left: 40px;"> <input style="width: 80px; height: 20px; border: 1px solid black;" type="text" value="Male(1)"/> <input style="width: 80px; height: 20px; border: 1px solid black;" type="text" value="Female(2)"/> </div>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 4 – 9 </div> <div style="display: flex; justify-content: space-around; margin-left: 40px; font-size: small;"> d d m m y y </div>																								
<p>3 How old are you?years</p>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 10 </div>																								
<p>4 Are you currently working?</p> <div style="display: flex; justify-content: space-around; margin-left: 40px;"> <input style="width: 80px; height: 20px; border: 1px solid black;" type="text" value="Yes(1)"/> <input style="width: 80px; height: 20px; border: 1px solid black;" type="text" value="No(2)"/> </div> <p>if yes, what work are you currently doing?</p>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 11 – 12 </div> <div style="display: flex; align-items: center; justify-content: space-between; margin-top: 20px;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 13 </div> <div style="display: flex; align-items: center; justify-content: space-between; margin-top: 20px;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 14 </div>																								
<p>5 What is your highest qualification?.....</p>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 15 </div>																								
<p>6 How many years have you been living in or close to Groendal?</p>	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 16 – 17 </div>																								
<p>7 What is your home language?</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-left: 20px;"> <tr><td style="width: 20px; text-align: center;">1</td><td>Afrikaans</td></tr> <tr><td style="text-align: center;">2</td><td>English</td></tr> <tr><td style="text-align: center;">3</td><td>isiNdebele</td></tr> <tr><td style="text-align: center;">4</td><td>isiXhosa</td></tr> <tr><td style="text-align: center;">5</td><td>Sesotho</td></tr> <tr><td style="text-align: center;">6</td><td>Setswana</td></tr> <tr><td style="text-align: center;">7</td><td>Tshivenda</td></tr> <tr><td style="text-align: center;">8</td><td>Xitsonga</td></tr> <tr><td style="text-align: center;">9</td><td>isizulu</td></tr> <tr><td style="text-align: center;">10</td><td>Sepedi</td></tr> <tr><td style="text-align: center;">11</td><td>siSwati</td></tr> <tr><td style="text-align: center;">12</td><td>Other,specify.....</td></tr> </table>	1	Afrikaans	2	English	3	isiNdebele	4	isiXhosa	5	Sesotho	6	Setswana	7	Tshivenda	8	Xitsonga	9	isizulu	10	Sepedi	11	siSwati	12	Other,specify.....	<div style="display: flex; align-items: center; justify-content: space-between;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 18 – 19 </div> <div style="display: flex; align-items: center; justify-content: space-between; margin-top: 20px;"> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black;" type="text"/> 20 – 21 </div>
1	Afrikaans																								
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9	isizulu																								
10	Sepedi																								
11	siSwati																								
12	Other,specify.....																								



GROEPS ONDERHOUD
demografiese inligting

Instruksies	Slegs vir kantoor gebruik
<p>Merk asseblief die toepaslike blokkie met 'n X of skryf u antwoord op die lyntjie.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 – 3
<p>1 Datum wat vaelys ingevul word (dd/mm/jj)/...../.....</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 – 9 d d m m j j
<p>2 Wat is u geslag?</p> <p><input type="checkbox"/> Manlik(1) <input type="checkbox"/> Vroulik(2)</p>	<input type="checkbox"/> 10
<p>3 Hoe oud is u?jaar</p>	<input type="checkbox"/> <input type="checkbox"/> 11 – 12
<p>4 Werk u tans?</p> <p><input type="checkbox"/> Yes(1) <input type="checkbox"/> No(2)</p> <p>indien ja, watter werk doen u tans?</p>	<input type="checkbox"/> 13 <input type="checkbox"/> 14
<p>5 Wat is u hoogste kwalifikasie?.....</p>	<input type="checkbox"/> 15
<p>6 Hoeveel jaar bly u in of naby Groendal?</p>	<input type="checkbox"/> <input type="checkbox"/> 16 – 17
<p>7 Wat is u moedertaal?</p> <p><input type="checkbox"/> 1 Afrikaans <input type="checkbox"/> 2 English <input type="checkbox"/> 3 isiNdebele <input type="checkbox"/> 4 isiXhosa <input type="checkbox"/> 5 Sesotho <input type="checkbox"/> 6 Setswana <input type="checkbox"/> 7 Tshivenda <input type="checkbox"/> 8 Xitsonga <input type="checkbox"/> 9 isizulu <input type="checkbox"/> 10 Sepedi <input type="checkbox"/> 11 siSwati <input type="checkbox"/> 12 Ander, brei uit.....</p>	<input type="checkbox"/> <input type="checkbox"/> 18 – 19 <input type="checkbox"/> <input type="checkbox"/> 20 – 21

APPENDIX B: GROUP INTERVIEW HANDOUT



GROUP INTERVIEW HANDOUT

ICF-CY sub-categories

PHYSICAL ENVIRONMENT:

- **Products for personal consumption** – “Any natural or human-made object or substance gathered, processed or manufactured for ingestion. Inclusion: food, drink and drugs”
- **Products and technology for personal use in daily living** – “Equipment, products and technologies used by people in daily activities such as clothes, textiles, furniture, appliances, cleaning products and tools”
- **Products and technology for communication** – “Equipment, products and technologies used by people in activities of sending and receiving information, such as optical and auditory devices, audio recorders and receivers, television and video equipment, telephone devices, sound transmission systems and face-to-face communication devices”
- **Products and technology for education** – “Equipment, products, processes, methods and technology used for acquisition of knowledge, expertise or skill, such as books, manuals, educational toys, computer hardware or software.”
- **Products and technology for culture, recreation and sport** – “Equipment, products and technology used for the conduct and enhancement of cultural, recreational and sporting activities, such as toys, skis, tennis balls and musical instruments.”
- **Products and technology for practice of religion or spirituality** – “Products and technology, unique or mass-produced, that are given or take on a symbolic meaning in the context of the practice of religion or spirituality, crucifixes, menorahs and prayer mats.”

(World Health Organization, 2007, pp. 191–199)

SOCIAL ENVIRONMENT:

- **Immediate family** – “Individuals related by birth, marriage or other relationship recognized by the culture as immediate family, such as spouses, partners, parents, siblings, children, foster parents, adoptive parents and grandparents.”
- **Extended family** – “Individuals related through family or marriage or other relationships recognized by the culture as extended family, such as aunts, uncles, nephews and nieces.”
- **Friends** – “Individuals who are close and ongoing participants in relationships characterized by trust and mutual support.”
- **Acquaintances, peers, colleagues, neighbours and community members** – “Individuals who are familiar to each other as acquaintances, peers, colleagues, neighbours, and community members, in situations of work, school, recreation, or other aspects of life, and who share demographic features such as age, gender, religious creed or ethnicity or pursue common interests”
- **People in positions of authority** – “Individuals who have decision-making responsibilities for others and who have socially defined influence or power based on their social, economic, cultural or religious roles in society, such as teachers, employers, supervisors, religious leaders, substitute decision-makers, guardians or trustees.”
- **People in subordinate positions** – “Individuals whose day-to-day life is influenced by people in positions of authority in work, school or other settings, such as students, workers and members of a religious group.”
- **Strangers** – “Individuals who are unfamiliar and unrelated, or those who have not yet established a relationship or association, including persons unknown to the individual but who are sharing a life situation with them, such as substitute teachers, co-workers or care providers.”
- **Domesticated animals** – “Animals that provide physical, emotional, or psychological support, such as pets (dogs, cats, birds, fish, etc.) and animals for personal mobility and transportation.”

- **Health professionals** – “All service providers working within the context of the health system, such as doctors, nurses, physiotherapists, occupational therapists, speech therapists, audiologists, orthotist-prosthetists, medical social workers.”
- **Other professionals** – “All service providers working outside the health system, including social workers, lawyers, teachers, architects, and designers.”

(World Health Organization, 2007, pp. 205–206)

APPENDIX C: Q SORT DEMOGRAPHICAL INFORMATION



Q sort demographical information

Instructions	For Office Use																								
Please mark the appropriate block with an X or write your answer on the space provided.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 – 3																								
1 Date questionnaire is completed (dd/mm/yy)/...../.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 – 9 d d m m y y																								
2 What is your gender? <input type="checkbox"/> Male(1) <input type="checkbox"/> Female(2)	<input type="checkbox"/> 10																								
3 How old are you?years	<input type="checkbox"/> <input type="checkbox"/> 11 – 12																								
4 What is your home language? <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>1</td><td>Afrikaans</td></tr> <tr><td>2</td><td>English</td></tr> <tr><td>3</td><td>isiNdebele</td></tr> <tr><td>4</td><td>isiXhosa</td></tr> <tr><td>5</td><td>Sesotho</td></tr> <tr><td>6</td><td>Setswana</td></tr> <tr><td>7</td><td>Tshivenda</td></tr> <tr><td>8</td><td>Xitsonga</td></tr> <tr><td>9</td><td>isizulu</td></tr> <tr><td>10</td><td>Sepedi</td></tr> <tr><td>11</td><td>siSwati</td></tr> <tr><td>12</td><td>Other,specify.....</td></tr> </table>	1	Afrikaans	2	English	3	isiNdebele	4	isiXhosa	5	Sesotho	6	Setswana	7	Tshivenda	8	Xitsonga	9	isizulu	10	Sepedi	11	siSwati	12	Other,specify.....	<input type="checkbox"/> <input type="checkbox"/> 13 – 14
1	Afrikaans																								
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4	isiXhosa																								
5	Sesotho																								
6	Setswana																								
7	Tshivenda																								
8	Xitsonga																								
9	isizulu																								
10	Sepedi																								
11	siSwati																								
12	Other,specify.....																								
5 Are you currently in school? <input type="checkbox"/> Yes(1) <input type="checkbox"/> No(2)	<input type="checkbox"/> 17																								
if yes , in what grade are you currently? Grade	<input type="checkbox"/> <input type="checkbox"/> 18 – 19																								
6 How many years have you been living in Groendal?years	<input type="checkbox"/> <input type="checkbox"/> 20 – 21																								
7 In what neighbourhood do you live? <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>1</td><td>Groendal</td></tr> <tr><td>2</td><td>Mooiwater</td></tr> <tr><td>3</td><td>Langrug</td></tr> <tr><td>4</td><td>Other</td></tr> </table>	1	Groendal	2	Mooiwater	3	Langrug	4	Other	<input type="checkbox"/> 22																
1	Groendal																								
2	Mooiwater																								
3	Langrug																								
4	Other																								

Q sort
demografiese inligting

Instruksies	Slegs vir kantoor gebruik
<p>Merk asseblief die toepaslike blokkie met 'n X of skryf jou antwoord op die lyntjie.</p> <p>1 Datum wat vraelys ingevul word (dd/mm/jj)/...../.....</p>	<p><input type="text"/> <input type="text"/> <input type="text"/> 1 – 3</p>
<p>2 Wat is jou geslag?</p> <p><input type="checkbox"/> Manlik(1) <input type="checkbox"/> Vroulik(2)</p>	<p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 4 – 9 d d m m j j</p>
<p>3 Hoe oud is jy?jaar</p>	<p><input type="text"/> <input type="text"/> 10</p> <p><input type="text"/> <input type="text"/> 11 – 12</p>
<p>4 Wat is jou moedertaal?</p> <p><input type="checkbox"/> 1 Afrikaans <input type="checkbox"/> 2 English <input type="checkbox"/> 3 isiNdebele <input type="checkbox"/> 4 isiXhosa <input type="checkbox"/> 5 Sesotho <input type="checkbox"/> 6 Setswana <input type="checkbox"/> 7 Tshivenda <input type="checkbox"/> 8 Xitsonga <input type="checkbox"/> 9 isizulu <input type="checkbox"/> 10 Sepedi <input type="checkbox"/> 11 siSwati <input type="checkbox"/> 12 Ander, brei uit.....</p>	<p><input type="text"/> <input type="text"/> 13 – 14</p> <p><input type="text"/> <input type="text"/> 15 – 16</p>
<p>5 Is jy in 'n skool?</p> <p><input type="checkbox"/> Yes(1) <input type="checkbox"/> No(2)</p> <p>if yes, in watter Graad is jy? Graad</p>	<p><input type="text"/> 17</p> <p><input type="text"/> <input type="text"/> 18 – 19</p>
<p>6 Hoeveel jaar bly jy al in Groendal?jaar</p>	<p><input type="text"/> <input type="text"/> 20 – 21</p>
<p>7 In watter woonbuurt bly jy?</p> <p><input type="checkbox"/> 1 Groendal <input type="checkbox"/> 2 Mooiwater <input type="checkbox"/> 3 Langrug <input type="checkbox"/> 4 Other</p>	<p><input type="text"/> 22</p>

APPENDIX D: CONDITION OF INSTRUCTION



CONDITION OF INSTRUCTION

THANK YOU FOR PARTICIPATING IN THIS STUDY

Please read through the following instructions

1. Today we will be looking at things around you that help you to be well. When we speak about being well today, we will be speaking about feeling content (or pleased) with the opportunities you have in your life to take part in activities that mean a lot to you.
2. There are a number of cards packed out on the table in front of you. All these cards have statements printed on them about things that we have found in the environment of Groendal where you live. Please read through all the cards together with the researcher.
3. There is another paper placed in front of you with a grid printed on it. We are going to use this paper to see how you feel about the different statements on the cards that we have just read. You will see that there are numbers printed at the top of the grid. The numbers go from -4 on the left, up until $+4$ on the right.
4. After reading through all the cards, select the two cards with the things in Groendal that you feel help you the **MOST** to be well. Place these cards in the two blocks under the number $+4$, on the right side of the paper in front of you. You can read through all the cards again before you choose and you can change your answer later, if you want to.
5. Now you can look at the cards again and select the two cards with the things in Groendal that you feel help you the **LEAST** to be well. You can place these cards in the blocks under the number -4 on the left side of the paper. Remember that you are allowed to change your answer later, if you would like to.
6. Now place cards in the $+3$, -3 , $+2$, -2 , $+1$, -1 , columns, jumping from right to left every time, until you reach the blocks in the middle of the page, under the number 0 . The cards you place under the number 0 are the ones that you feel neutral

about. Afterwards you can look at all the cards that you have placed on the paper and change any around if you would like to.

7. Remember that you can only place one card in a block and that you can ask questions at any time

“CONDITION OF INSTRUCTION”

DANKIE DAT JY DEELNEEM AAN DIE STUDIE

Lees asseblief deur die volgende instruksies

1. Vandag gaan ons praat oor dinge rondom jou wat jou laat goed of wel voel. Vir vandag, praat ons van om wel te wees as om tevrede te wees met die geleentheid wat jy het in jou lewe om deel te neem aan aktiwiteite wat vir jou baie beteken.
2. Op die tafel voor jou is daar 'n klomp kaarte uitgepak. Die kaarte het sinne op hulle gedruk oor dinge wat ons in Groendal, waar jy bly, gevind het. Lees asseblief deur al die kaarte saam met die navorser.
3. Daar is nog 'n papier op die tafel voor jou met blokkies op gedruk. Ons gaan hierdie papier gebruik om te sien hoe jy voel oor die verskillende sinne op die kaartjies wat ons gelees het. Jy sal sien dat daar nommers bo-aan die blokkies gedruk is. Die nommers gaan van -4 aan die linkerkant, tot by +4 aan die regterkant.
4. Nadat jy deur al die kaartjies gelees het, kies die twee kaartjies met die dinge in Groendal wat jou die **MEESTE** help om wel te wees. Sit hierdie twee kaartjies in die blokke onder die nommer +4 (aan die regterkant van die bladsy voor jou). Jy kan eers weer deur al die kaartjies lees voor jy besluit, en jy kan later jou antwoord verander as jy wil.
5. Nou kan jy weer na die kaartjies kyk en twee kaartjies kies met dinge in Groendal wat jy voel die **MINSTE** help dat jy wel is. Jy kan hierdie twee kaartjies in die blokke sit onder die nommer -4 (aan die linkerkant van die papier). Onthou dat jy jou antwoord later kan verander as jy wil.
6. Jy kan nou kaartjies in die +3, -3, +2, -2, +1, -1 kolom sit. Spring elke keer van regs na links, totdat jy by die middelste kolom kom onder die 0. Die kaartjies wat jy onder die 0 pak is die dinge waarvoor jy neutraal voel. As jy alles klaar gepak het kan jy daarna kyk en enige veranderinge maak as jy wil.
7. Onthou dat jy net een kaartjie in 'n blok mag sit en dat jy enige tyd vrae mag vra.

APPENDIX F: INFORMATION LETTER FOR HEAD OF COMMUNITY CENTRE



INFORMATION LETTER FOR HEAD OF COMMUNITY CENTRE

To whom it may concern

I am an Occupational Therapist, currently busy with my master's degree. I will be investigating which physical- and social environmental factors adolescents living in Groendal, identify as enabling to their well-being.

The study will follow a mixed methods study design, called Q methodology. The individuals who will be included in the study will be adolescents who attend the Lord's Acre Community Centre's, as well as the Franschoek community Sports Centre's services, who are between the ages of 13 and 17 years and 11 months. The participants must be able to speak and understand Afrikaans or English. The data gathering will be done with each participant individually. The participants will be asked to fill in a basic demographical questionnaire and after that they will be asked to sort a number of statements onto a grid. All the statements will be examples of physical- and social environmental factors that are present in Groendal. After this the participants will be asked two open-ended questions with regards to their environment in Groedal and their answers will be recorded with an audio recorder. The data gathering will take approximately 30 minutes per participant. There are no known risks involved for participants of this study, and no remuneration will be provided.

Each participant will be given pertinent information on the study while involved and after the results are available. Participation is voluntary, and refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled; the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.

Efforts will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law. Organisations that may inspect and/or copy your research records for quality assurance and data analysis

include groups such as the Ethics Committee for Medical Research and the Medicines Control Council (where appropriate). If results are published, this may lead to individual/cohort identification.

Please call +27 76 818 8845 or +27 83 656 1541 for any enquiries.

Thank you for your time

Kind Regards



Mrs. Jani du Preez
Master's Student
+27 76 818 8845



Mrs. Monique Strauss
Study Leader
+27 83 656 1541

Contact details of Secretariat and Chair: Ethics Committee of the Faculty of Health Sciences, University of the Free State – for reporting of complaints/problems: Telephone number +27 51 405 2812

APPENDIX G: INFORMATION LETTER FOR SEMI-STRUCTURED GROUP INTERVIEW



INFORMATION LETTER FOR SEMI-STRUCTURED GROUP INTERVIEW

To whom it may concern

I am an Occupational Therapist, currently busy with my master's degree. I will be investigating which physical- and social environmental factors adolescents living in Groendal, identify as enabling to their well-being.

The study will follow a mixed methods study design, called Q methodology. The individuals who will be included in the study will be adolescents who attend the Lord's Acre Community Centre's services (soup kitchen, after care, holiday program and community choir practice), who are between 13 and 17 years and 11 months. The participants must be able to speak and understand Afrikaans and/or English. The data gathering will be done with each participant individually. The participants will be asked to fill in a basic demographical questionnaire and after that they will be asked to sort a number of statements onto a grid. All the statements will be examples of physical- and social environmental factors that are present in Groendal. After this the participants will be asked two open-ended questions with regards to their environment in Groendal. The data gathering will take approximately 40 to 50 minutes per participant.

In order to use applicable statements regarding the environmental factors in Groendal, a **semi-structured group interview** will be held with a selected group of professionals and community members who know the Groendal community well. The group interview will be conducted prior to the actual data gathering with the adolescents and will take approximately one and a half hour to facilitate and will involve a discussion regarding which specific physical- and social environmental factors are present in Groendal. The interview will be held at the Lord's Acre Community Centre and will be recorded with an audio recorder.

There are no known risks involved for participants of this study, and no remuneration will be provided.

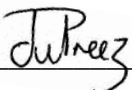
Each participant will be given pertinent information on the study while involved and after the results are available. **Participation is voluntary**, and refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled; the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.

Efforts will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law. Organisations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the Ethics Committee for Medical Research and the Medicines Control Council (where appropriate). If results are published, this may lead to individual/cohort identification.


Please call **+27 76 818 8845** or **+27 83 656 1541** for any enquiries.

Thank you for your time.

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Contact details of Secretariat and Chair: Ethics Committee of the Faculty of Health Sciences, University of the Free State – for reporting of complaints/problems: Telephone number +27 51 405 2812

APPENDIX H: INFORMATION LETTER FOR PARENTS



INFORMATION LETTER FOR PARENTS

To whom it may concern

I am an Occupational Therapist, busy with my master's degree. I will be doing research to find out which things in Groendal's environment help teenagers to be well.

The teenagers who attend the different activities at the Lord's Acre Community Centre and at SCORE, the community sports centre, will be asked to be in the study. The teenagers will be seen one-by-one at the centres. They will be asked to sort cards with words about Groendal's environment on a grid to show which things in Groendal help them the most to be well. They will then be asked to answer two questions about their environment in Groendal which will be recorded on an audio recorder. It will take about 30 minutes to take part in the study.

There are no known risks for participants of this study, and no payment will be provided. Every participant will receive information about the study before they take part and also after the results are available. **Participation is voluntary** and teenagers can refuse to take part in the study at any time without penalty or loss of benefits.

Efforts will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be shared if required by law. Organisations that may inspect and/or copy research records for quality assurance and data analysis include groups such as the Ethics Committee for Medical Research and the Medicines Control Council (where appropriate). If results are published, this may lead to individual/cohort identification.

Please call **+27 76 818 8845** or **+27 83 656 1541** for any enquiries.

Thank you for your time.

Kind Regards


 Mrs. Jani du Preez
 Masters Student
 +27 76 818 8845


 Mrs. Monique Strauss
 Supervisor
 +27 83 656 1541

Contact details of Secretariat and Chair: Ethics Committee of the Faculty of Health Sciences, University of the Free State – for reporting of complaints/problems: Telephone number +27 51 401 7795

INLIGTINGSBRIEF VIR OUERS

Vir wie dit mag aangaan

Ek is 'n Arbeidsterapeut wat besig is met navorsing vir 'n meestersgraad. Ek gaan navorsing doen oor faktore in Groendal wat bydra tot die welstand van tieners.

Tieners wat die Lord's Acre Gemeenskap Sentrum asook SCORE, gemeenskaps sportsentrum, se aktiwiteite bywoon sal gevra word om deel te neem aan die studie. Die tieners gaan individueel gesien word by die sentrums. Hulle sal gevra word om kaartjies, met woorde oor Groendal se omgewing op, te sorteer op 'n blokkies-rooster, om te bepaal watter dinge in Groendal die meeste bydra tot hulle welstand. Hulle sal dan gevra word om twee vrae te antwoord oor hulle omgewing in Groendal wat opgeneem sal word met 'n bandopnemer. Die onderhoude sal omtrent 30 minute duur.

Daar is geen bekende risiko's vir deelnemers aan die studie nie. Daar is ook geen vergoeding vir deelname nie. Elke deelnemer sal inligting ontvang oor die studie voor hulle deelneem, asook na die resultate beskikbaar gemaak is. **Deelname is vrywillig** en tieners kan op enige stadium weier om deel te neem sonder enige penalisering of verlies van voordele.

Daar sal gepoog word om persoonlike inligting konfidensieël te hou, maar absolute konfidensialiteit kan nie gewaarborg word nie. Indien wetlik so vereis word kan persoonlike inligting bekend gemaak word. Organisasies wat moontlik navorsingsrekords kan inspekteer of kopieër, ter wille van kwaliteitskontrole en data analise, sluit in die Etiese Komitee vir Mediese Navorsing en die Medisyne Beheerraad (waar toepaslik). Sou resultate gepubliseer word kan dit individuele/kohort identifikasie tot gevolg hê.

Skakel asb. **+27 76 818 8845** of **+27 83 656 1541** met enige navrae.

Dankie vir u tyd

Vriendelike groete


Mev. Jani du Preez
Meesters student
+27 76 818 8845


Mev. Monique Strauss
Supervisor
+27 83 656 1541

Kontak besonderhede van Sekretaris en voorsitter: Etiese Komitee van die Fakulteit van Gesondheids wetenskappe, Universiteit van die Vrystaat – vir rapportering van klagtes/probleme: Telefoon nommer +27 51 401 7795

APPENDIX I: CONSENT TO CONDUCT RESEARCH AT COMMUNITY CENTRE



CONSENT TO CONDUCT RESEARCH AT COMMUNITY CENTRE

PROJECT TITLE: Environmental factors enabling occupational well-being of adolescents living in Groendal community

You have been asked to give permission for a research study to be conducted at your Community Centre.

You have been informed about the study by Mrs. Jani du Preez, Occupational Therapist.

You may contact Mrs. Jani du Preez or Mrs. Monique Strauss at +27 76 818 8845 or +27 83 656 1541 at any time if you have questions about the research or if you are injured as a result of the research.

You may contact the Secretariat of the Health Science Research Ethics Committee (HSREC) of the University of the Free State at telephone number +27 51 401 7795 if you have questions about your rights as a research subject.

The adolescents at the community centre's participation in this research is voluntary, and they and you will not be penalised or lose benefits if you refuse to participate or decide to terminate participation.

If you agree to give permission for this study to be conducted, you will be given a signed copy of this document as well as the participant information sheet, which is a written summary of the research.

The research study, including the above information has been verbally described to me. I understand what the adolescents at our centre's involvement in the study means and I voluntarily agree to let them participate.

Signature of head of centre

Date

Signature of witness

Date

APPENDIX J: CONSENT TO PARTICIPATE IN GROUP INTERVIEW



CONSENT TO PARTICIPATE IN GROUP INTERVIEW

PROJECT TITLE: Environmental factors enabling occupational well-being of adolescents living in Groendal community

You have been asked to participate in a semi-structured group interview discussion with the purpose to gather information regarding the physical- and social environmental factors that are present in the Groendal community.

You have been informed about the study by Mrs. Jani du Preez, Occupational Therapist.

You may contact Mrs. Jani du Preez or Mrs. Monique Strauss at +27 76 818 8845 or +27 83 656 1541 at any time if you have questions about the research or if you are injured as a result of the research.

You may contact the Secretariat of the Health Science Research Ethics Committee (HSREC) of the University of the Free State at telephone number +27 51 401 7795 if you have questions about your rights as a research subject.

Your participation in this research is voluntary, and you will not be penalised or lose benefits if you refuse to participate or decide to terminate participation.

If you agree to give permission for this study to be conducted, you will be given a signed copy of this document as well as the participant information sheet, which is a written summary of the research.

The research study, including the above information has been verbally described to me. I understand what my involvement in the study means and I voluntarily agree to participate.

Signature of group member

Date

Signature of Witness

Date

APPENDIX K: PARENT/GUARDIAN CONSENT FORM



PARENT/GUARDIAN CONSENT FORM

PROJECT TITLE: Environmental factors enabling occupational well-being of adolescents living in Groendal community

You have been asked to allow your child or child in your care to participate in a research study on the physical- and social environmental factors that are present in the Groendal community.

You have been informed about the study by Mrs. Jani du Preez, Occupational Therapist via an information letter.

You may contact Mrs. Jani du Preez or Mrs. Monique Strauss at +27 76 818 8845 or +27 83 656 1541 at any time if you have questions about the research or if you are injured as a result of the research.

You may contact the Secretariat of the Health Science Research Ethics Committee (HSREC) of the University of the Free State at telephone number +27 51 401 7795 if you have questions about your child's rights as a research subject.

Your child's participation in this research is voluntary, and he/she will not be penalised or lose benefits if you refuse to let them participate or decide to terminate participation.

If you agree to give permission for this study to be conducted, you will be given a signed copy of this document as well as the participant information sheet, which is a written summary of the research.

The research study, including the above information has been described to me. I understand what my child or child in my care's involvement in the study means and I voluntarily agree to let them participate.

Signature of parent/guardian

Date

Signature of witness

Date

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OUER/VOOG TOESTEMMINGSVORM

PROJEK TITEL: “Environmental factors enabling occupational well-being of adolescents living in Groendal community”

U is gevra om u kind of kind in u sorg toe te laat om deel te neem aan ‘n navorsingsprojek rakende die fisiese- en sosiale omgewingsfaktore in die Groendal gemeenskap.

U is deur Mev. Jani du Preez Arbeidsterapeut, met behulp van ‘n inligtingsbrief ingelig omtrent die studie.

As u enige navrae het omtrent die navorsing of as u kind enigsens benadeel is deur die studie, kan u enige tyd kontak maak met Mev. Jani du Preez of Mev. Monique Strauss by +27 76 818 8845 of +27 83 656 1541

Skakel gerus die Sekretariaat van die Gesondheidswetenskappe Navorsings Etiese Komitee (HSREC) van die Universiteit van die Vrystaat by +27 51 401 7795 indien u enige vrae het oor u kind se regte as ‘n navorsings deelnemer.

U kind se deelname aan hierdie navorsing is vrywillig en hy/sy sal nie op enige wyse gepenaliseer word of enige voordele verloor indien hy/sy sou besluit om nie deel te neem nie of op enige stadium deelname sou opskort

Indien u sou instem om toestemming te gee vir u kind se deelname aan die studie, sal u ‘n getekende afskrif van hierdie ooreenkoms ontvang, sowel as ‘n deelnemers inligtingstuk wat ‘n opsomming is van die navorsingsprojek.

Die navorsingstudie, insluitende die bostaande inligting is aan my verduidelik. Ek verstaan wat my kind of kind in my sorg se betrokkenheid by die studie behels en ek stem vrywillig in tot sy/ haar deelname.

Handtekening van ouer/voog

Datum

Handtekening van getuie

Datum

APPENDIX L: ADOLESCENT ASSENT FORM



ADOLESCENT ASSENT FORM

You are being asked to take part in a research study being done by the University of the Free State. In this study, we are interested to know more about the things in your environment that help you to “be well”. We have asked the head of the community centre and your parents/guardians whether it is OK for you to participate, but now we want to see if it is OK with you.

If you decide to take part in this study, you will be having an interview with the researcher about Groendal, and the things that are in your environment. This will help us to understand which things in the environment of Groendal help teenagers. It will take about 30 minutes to do. All the information we collect will be kept secret as far as possible and you don't have to share any of your answers in the questionnaire with anybody else. We will not use your name, so everything will remain private.

If you sign this paper, you are showing that you understand what is going to happen and have asked any questions you may have about the research. You can also ask questions later if you cannot think of them now. Signing this form does not mean that you have to finish the study - you can pull out from the study at any time without explaining why.

You may contact Mrs. Jani du Preez or Mrs. Monique Strauss at +27 76 818 8845 or +27 83 656 1541 at any time if you have questions about the research.

Participant's signature

Date

Contact details of Secretariat and Chair: Ethics Committee of the Faculty of Health Sciences, University of the Free State – for reporting of complaints/problems: Telephone number +27 51 401 7795

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ADOLESCENT INSTEMMINGSVORM

Jy word gevra om deel te neem aan 'n navorsingstudie deur die Universiteit van die Vrystaat. In hierdie studie wil ons meer uitvind oor dinge in jou omgewing wat jou help om wel te wees. Ons het toestemming by die hoof van die gemeenskapsentrum en by jou ouers/voogde gekry vir jou om deel te neem, maar nou wil ons hoor of dit reg is met jou.

As jy besluit om deel te neem aan die studie sal jy 'n onderhoud met die navorser hê oor Groendal en die dinge wat in jou omgewing in Groendal is. Dit sal ons help om te verstaan watter dinge in Groendal vir tieners help. Dit sal omtrent 30 minute vat om te doen. Al die inligting wat ons kry sal sover moontlik 'n geheim gehou word en jy hoef nie jou antwoorde met enige iemand te deel nie. Ons sal nie jou naam gebruik nie, so alles sal privaat bly.

As jy hierdie papier teken, wys jy dat jy verstaan waaroor die studie gaan en dat jy enige vrae gevra het wat jy gehad het oor die studie. Jy kan ook later vrae vra as jy nie nou daaraan kan dink nie. As jy hierdie vorm teken beteken dit nie dat jy die studie hoef klaar te maak nie – jy kan enige tyd onttrek sonder om te verduidelik hoekom.

Jy kan vir Mev. Jani du Preez of Mev. Monique Strauss bel by +27 76 818 8845 of +27 83 656 1541 as jy vrae het oor die studie

Deelnemer

Datum

Kontak besonderhede van Sekretaris en voorsitter: Etiese Komitee van die Fakulteit van Gesondheids wetenskappe, Universiteit van die Vrystaat – vir rapportering van klagtes/probleme: Telefoon nommer +27 51 401 7795

Vir kantoor gebruik			
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