HEALTH PROMOTION: THE DESIGN OF A SCHOOL HEALTH INDEX SCORE CARD TO ASSESS PSYCHOSOCIAL HEALTH AND WELL-BEING IN EARLY CHILDHOOD DEVELOPMENT AT PRIMARY SCHOOLS

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Submitted in Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Child and Family Studies, Department of Social Work, Faculty of Community and Health Sciences, University of the Western Cape

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ABSTRACT

Schools, world-wide, have been regarded as important settings for health promotion and health education. Research indicate that schools constitute a crucial setting for programmes that aim at promoting the health of children, young adults, their families and their community, and could make a positive contribution to the overall health of the society. The psychosocial theory of human development proposes to understand and describe the importance of psychosocial health and well-being of children, in their different stages of development, across the life span, as well as how the different environments of the child’s rearing could either add, or hinder, optimal development. Healthy Early Childhood Development, which includes physical, social-emotional, as well as linguistic/cognitive development, is fundamental to success and happiness, not only during childhood, but throughout the course of life. This study, therefore, aimed to design a School Health Index Score Card that assesses psychosocial health and well-being in Early Childhood Development at primary schools in the rural Western Cape. The School Well-Being Model serves as a conceptual framework for this study and is based on Allardt’s Sociological Welfare Theory, which assesses well-being as an entity in a school setting. This model takes into account the impact of family, social relationships, personal self-fulfilment and health aspects of children.

This study used a mixed methodological sequential explanatory design that consisted of two distinct phases (with 2 stages in each phase) within a participatory action research framework. A needs assessment and a systematic review was conducted in phase 1 followed by phase 2, action planning-design of a school health index score card and a Delphi technique study. Quantitative, numeric, data were collected and analysed using the Statistical Package for Social Sciences V23 (SPSS) for descriptive and inferential statistics first, while the qualitative data were collected and analysed secondly in sequence for this design. The qualitative process helped to explain, or elaborate, on the quantitative results obtained from the respondents by means of a self-administered questionnaire that consisted of three sections; demographical information and the adaptation of the (i) Pediatric Quality of Life Inventory (PedsQL) and (ii) Strengths and Difficulties Questionnaire. The data were collected from teachers, principals, community leaders, parents/primary caregivers, members of school
governing bodies, school nurses, social workers, health promotion officers, experts in early childhood development and school psychologists of learners in Grade R to Grade 3 at three primary schools in the rural Western Cape, South Africa.

The systematic review of previous studies revealed that, (i) instruments are often designed to identify physical ailments, the individual’s ability to adjust to particular situations, psychiatric diagnosis, educational and intellectual abilities, as well as the personal characteristics of children over their entire lifespan, (ii) that promotion of psychosocial health and well-being challenges in early development does promote positive child development outcomes in later life, and (iii) the use of a valid and reliable instrument to assess psychosocial health and well-being in schools could have a number of advantages for children, their families, teachers and the community.

The findings of the current study also indicated that, (i) parents/primary perceived their children to be experiencing challenges in school functioning, social functioning and physical functioning continually and, (ii) teachers perceived the learners to be experiencing social behavioural, hyperactive and behavioural challenges continually at school. Schools play an integral part in the lives of children and their families, by supporting children to form social and emotional relationships at school. Overall, this current study suggested that the School Health Index Score Card was considered to be user friendly, as well as a useful tool to assess the psychosocial health and well-being challenges of learners at primary schools in a South African context.
KEY WORDS

Community

Early childhood development

Health

Health education

Health promotion

Psychosocial

Schools

Well-being
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACRW</td>
<td>African Charter on the Rights and Welfare of the Child</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
</tr>
<tr>
<td>ECD</td>
<td>Early Childhood Development</td>
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<tr>
<td>HPS</td>
<td>Health Promoting School</td>
</tr>
<tr>
<td>MM</td>
<td>Mixed Methods</td>
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<td>MIET</td>
<td>Media In Education Trust</td>
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<tr>
<td>SAC</td>
<td>South African Constitution and the Children’s Act</td>
</tr>
<tr>
<td>SHISC</td>
<td>School Health Index Score Card</td>
</tr>
<tr>
<td>TWK</td>
<td>Theewaterskloof</td>
</tr>
<tr>
<td>UNCRC</td>
<td>United Convention on the Rights of the Child</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
</tr>
<tr>
<td>UN</td>
<td>United Nation</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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DECLARATION

I, the undersigned, hereby declare that the thesis entitled, “Health Promotion: The design, implementation and evaluation of school health index score that assess psychosocial health and well-being at primary schools” is my own work, that it has not been submitted for any degree or examination at any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Full names: Karin Elizabeth Daniels

Date: August 2016

Signature: ................................
I dedicate this thesis to God, for giving me health and strength to obtain my goal, and to my mother, Caroline Wilhelmina Michaels, for her endless prayers, patience, love, support, guidance, and her hard-work to make this journey possible.

I will always be indebted to you mom.
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Matt: 19 verse 26

“But Jesus looked at them and said to them, “With men, this is impossible, but
with God, all things are possible”

Accept my humble THANK YOU
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CHAPTER ONE

INTRODUCTION

1.1. Background and Rationale

With the introduction of the Reception (Grade R) year for learners at primary school level of education (Biersteker, 2010), more children are educated in schools, than ever before in South Africa’s history. The Education Statistics of South Africa (2013) shows that more than twelve (12) million learners were registered, across all sectors of the basic education system (South Africa (SA), Department of Basic Education (DoBE), 2015, p. 3). These statistics show that 93% were in ordinary public schools, while 4% were in ordinary independent schools, with the highest proportion of learners in ordinary schools (33.2%), located in the foundation phase (SA DoBE, 2015, p. 3). An ordinary school is defined as “a school that is not a special school”, and include primary schools, secondary schools, combined and intermediate schools (SA DoBE, 2015, p. 43). A special school is defined as “a school, resourced to deliver education to learners requiring high-intensity education, and other support, on either a full-time, or a part-time, basis. The learners, who attend these schools, include those, who are challenged with physical, intellectual and sensory disabilities, or those, who have serious behavioural and/or emotional problems, as well as those, who are in conflict with the law or whose health-care needs are complex” (SADoBE, 2015, p. 44).

Dawes, Kvalsig, Rama and Richter (2004a), state in the Report for UNICEF that, in all South African schools, health promotion and health education activities occur, because it forms part of the Life Orientation curriculum taught at schools (South Africa, Departments of Health [DoH] and Basic Education [DoBE], 2012). Schools, world-wide, have been regarded as important settings for health education and health promotion, with less attention being paid to the impact that the school, as an organisation, as well as the community, have on the health of the learner/s (St Leger, Young, Blanchard & Perry, 2010).

A study conducted by Bracken (2007) indicate that psychosocial factors, such as social support, stress and psychological distress, have an impact on the physical health of an
individual, as well as health promotion activities. Schools, therefore, constitute a crucial setting for programmes that aim to promote the health of children, young adults, their families and their community, and could yield positive contribution to the overall health of society. Progressing towards building a democratic society in South Africa, major policies and regulatory frameworks of education have been established. One of these policies is, the Integrated School Health Policy (SA, DoH &DoBE, 2012), which focuses on addressing the current health needs of learners, to implement interventions that ensure support and promote the development of health and well-being of all learners. These policies focus on changing the structure and process of the education system in South Africa.

The WHO called a special meeting in late 1984, in Copenhagen, Denmark, to provide some clarity and direction for a new world-wide public movement, which led to the first substantive document on health promotion. The Concepts and Principles of Health Promotion, later published in the first edition of Health Promotion International, became the springboard for the Ottawa Conference and Charter (WHO, 1984;1986a;1986b;1986c). At this conference, all the participants defined health promotion as “…the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behavior towards a wide range of social and environmental interventions”. In addition, the WHO, through the Alma-Ata Declaration, advocated “health for all”, and recommended primary health care (PHC), as the core strategy to achieve this goal (World Health Organisation [WHO], 1978). The World Health Organisation [WHO] (2007) indicated that countries across the world responded to this call by designing, adapting, and implementing primary care strategies to improve population health. Due to the momentum gained in health promotion, the World Health Organisation (WHO) identified that a “healthy public policy, establishes the environment” at a second International Conference on Health Promotion in Adelaide, Australia (World Health Organisation [WHO], 1998). The main focus of the healthy public policy was to create an environment that enables an individual to lead a healthier life.

Research conducted by Haq (2013) indicates that a child’s physical and social environment is critical for the child’s growth and development. He adds that measuring the developmental opportunities available in a child’s environment, is crucial to screening children in need, as
well as to assess the effectiveness of Early Childhood Development (ECD) interventions, which aim to improve a child’s environment. Additionally, according to Irwin, Siddiqui and Hertzman (2007), ECD interventions aim to promote child health at the family, household and community levels, maximising the child’s chances of becoming a healthy, intelligent, and ultimately, a productive, individual.

Durlak and DuPre (2008) assert that improving the effectiveness of implementation and the monitoring of health programmes have been emphasised by various studies. Durlak, Dymnicki, Taylor, Weissberg and Schellinger (2011) suggest that the monitoring of a process is positively correlated with programme outcomes. According to Engle, Black, Behrman, de Mello, Gertler, Kapiriri et al. (2007), early childhood interventions to promote nutrition, as well as cognitive and social-emotional development, could facilitate later gains from educational and societal opportunities, and are critical strategies to ensure responsible citizens and productive adults. Additionally, health promoting actions at all levels and arenas in society, benefit, not only a child, but the family and broader community. Various research studies indicate that healthy early child development, which includes physical, social-emotional, and linguistic/cognitive development, is fundamental to success and happiness, not only during childhood, but throughout the life span (Grantham-McGregor, Cheung, Cueto, Glewwe, Richter & Strupp, 2007).

What constitutes psychosocial health and well-being, lies in the definition of health established by the World Health Organisation (WHO, 1948), which defines health as a “state of complete physical, mental and social well-being and not merely the absence of disease and infirmity”. According to the Alma-Ata Declaration (WHO, 1978), this definition not only supports a shift from a curative to a comprehensive model, but it includes the psychosocial aspects of care. The importance of psychosocial health and well-being in ECD has, therefore, been highlighted by the United Nations Convention on the Rights of the Child (UN, 1989) which stipulates, in Article 6, that a child has a right to develop to “the maximum extent possible”, and in Article 27, that “state parties recognize the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development”. This thesis endorses the principles of the psychosocial health and well-being of children in early childhood development, which is seen as a whole by the WHO, meaning that, in order
for children to have optimal health, they require the ability to grow, develop and interact with their environment physically, mentally, socially, morally and spiritually.

1.2. Psychosocial Health and Well-being

According to Chilcott (2008), the need for schools to recognise their role and impact on the mental well-being of children has been supported by studies that have associated symptoms of childhood depression with school experiences (Shochet, Homel, Cockshaw & Montgomery, 2008). Schools play a vital role in overcoming childhood mental health disorders, with one in five children suffering anxiety disorders and depression inextricably linked with their education environment (Abrams, Theberge & Karan, 2005). The International Union for Health Promotion and Education [IUHPE] (2010) further indicates that mental health initiatives in schools seek to build the social, emotional and spiritual well-being of children. These initiatives would enable children to achieve education and health goals that would allow them to interact with their peers, teachers, family and community in a respectable way.

Additionally, Moore, McDonald and McHugh-Dillon (2014) assert that a disadvantaged environment has an impact on early childhood development, with adverse effects that persist into adulthood. Research further reveals that persistent efforts have been made to reduce health inequalities, which aim to improve developmental outcomes for children, who live in disadvantaged communities, over the last few decades (Huang, Calzada, Cheng & Brotman, 2012). Research conducted by Engle, Fernald et al. (2011) suggest that the returns on investment in young children are important, because early childhood is the most effective period, during which to intervene, in order to ensure that children develop to their full potential.

According to Britto, Kagan and Brookes-Gunn (2003, p. 6) child development refers to “the dynamic and continuous process of physical, social, emotional and mental change building on the preceding stage”. They further emphasise that “development occurs as a child is able to handle consistently more complex levels of moving, thinking, speaking, feeling and relating to others”. McCain, Mustard and Shanker (2007) assert that the early development years of an individual establishes the basic architecture and functions of the brain. Their studies also reveal that poor development affects the health (both physically and mentally), behaviour and
learning of the child in later stages of life.

Additional studies suggest that the development of a child is an important determinant of health over the life span, with early developmental opportunities establishing an important foundation for the child’s health, well-being and academic success (Grantham-McGregor et al., 2007). However, a recent study conducted by Huang et al. (2012) reveals that the environment exerts a crucial influence on the health development of an individual, across the life span.

1.3. Conceptual Framework

The aforementioned reasons dictated that this current study be guided by Erik Erikson’s (1950) Psychosocial Theory of Development, to understand and describe the importance of children’s psychosocial health and well-being throughout the various stages of development across their life span, as well as how children’s varied environments of origin, promote or hamper their optimal development. This theory of human development, therefore, adds to the idea of a Conceptual Model of School Well-Being by Konu and Rimpelä (2002), which relates to the psychosocial health and well-being of children at home, school and the broader community, in which they live. Konu and Rimpelä’s (2002) study also focuses on the key concepts of psychosocial health and well-being in early childhood development, based on the assumption that children are able to thrive holistically, if they experience psychosocial health and well-being in the early phases of their lives.

In addition, Erikson’s Theory of Psychosocial Development (Erikson, 1950) describes the impact of social experiences throughout the whole life span and also provides insights into the formation of a healthy personality. His theory includes eight stages of development, with each stage being characterised by a crisis or social conflict that occurs. Although these stages are not generally dreadful situations, they require solutions that are satisfying, both personally and socially (Sokol, 2009). According to Erikson (1950), each stage has to be resolved, before a child can transcend to the subsequent stage in their development. He believed that failure to complete a stage would lead to the inability to complete the following stage. By providing social opportunity and support, the child’s primary caregiver, teacher, and those, with whom the child interacts on a daily basis, could help him/her to overcome each crisis, by
recognising the importance of their role in each stage.

This theory further contributes to the idea of the Conceptual Model of Well-Being that has been developed for a school setting. The theoretical background for the school well-being model derives from the Sociological Theory of Welfare and has also been used in the evaluation of the quality of working life (Allardt, 1976a; Allardt, 1976b; Allardt, 1989). According to Konu and Rimpelä (2002), the school well-being model considers health education and health promotion as important parts of schooling and strives to study the school and schooling as an entity. Similarly, in this model, well-being, education and learning are interconnected, with teaching and education affecting every category of well-being that is connected to learning.

1.4. Health Promotion

The emergence of health promotion as a cornerstone of contemporary public health, is aimed at advancing the physical, social and mental health of an individual, in their broader community (World Health Organisation [WHO], 1986). According to Onya (2007), one major problem for the development of Health Promotion in South Africa, is infrastructure, with limited evaluation and research of Health Promotion. The first significant part of new policy for Health Promotion in South Africa, appeared firstly in the African National Congress health policy document (African National Congress, 1994), in which health care services and reproductive health care were included (Onya, 2007). However, the mechanisms that demonstrate the evidence of the effectiveness of Health Promotion, in terms of health, social, economic and political impact, are lacking, with occupational standards for health promotion education and training being required (International Union for Health Promotion & Education [IUHPE], 2007).

New policies and programmes, in line with the new Constitution of the Republic of South Africa (Act 108 of 1996), have been established and implemented to improve the quality of life of the nation. The schools’ and preschools’ role of enhancing a learner’s emotional and social development, as well as competence, is viewed as equally important, as their role of supporting academic development and competence (Holden, 2005). According to the International Union for Health Promotion & Education, health promotion in a school setting
could be defined “as any activity undertaken to improve and/or protect the health of all school users” (IUPHE, 2010). Similarly, health education in a school, defined as “a communication activity and involves learning and teaching pertaining to knowledge, beliefs, attitudes, values, skills and competencies”, often focuses on particular topics, namely tobacco, alcohol and nutrition, and reflects holistically on health. In this context, health promotion is a broader concept than health education, and include provision and activities that relate to: (i) school policies; (ii) the physical and social environment of the school; (iii) the school curriculum; (iv) community links; and (v) health services. Health education in South Africa is a key element of the Integrated School Health Policy (SA, DoH & DBE, 2012), which is incorporated in the school curriculum and taught via the Life Orientation learning areas. A study conducted by Zubrick, Williams, Silburn and Vimpani (2000), assert that family, school and the community are key settings that interdependently shape the well-being and development of children, with schools offering practical opportunities for the implementation of health development programmes.

According to the WHO (1997), with or without the full support of families and the community, schools are the best place to develop mental well-being programmes for children because:

- Almost all children attend school at some time during their lives;
- Schools are often the strongest social and educational institution available for intervention;
- Schools have a profound influence on children, their families and the community; and
- Young people’s “ability and motivation to stay in school, to learn, and to utilise what they learn, is affected by their mental well-being”.

Therefore, health promotion is multi-dimensional, due to its socio-political roles, participation in public health policy formulation, social education programme development and political advocacy (Whitehead, 2003). However, Tulchinsky and Varavikova (2008), define health promotion as “a guiding concept that involves activities intended that enhances individual and community health and well-being”. In this context, health promotion is a key element of the ‘New Public Health’ concept, which means that health promotion is
accordingly practiced by various organisations and individuals, from different professional backgrounds, all working towards achieving common goals to improve the health and quality of life of individuals in their community (Tulchinsky & Varavikova, 2008).

The Joint Committee on Health Education and Promotion Terminology (2012, p. 19) defines health promotion as “any planned combination of educational, political, environmental regulation or organisational mechanisms that support actions and conditions of living, conducive to health of individuals, groups and communities”. Through narrowing the focus of health education, health promotion, therefore, addresses the wider environmental and lifestyle determinants that impact on health. Health education forms an integral component of health promotion, because health is often referred to as the “absence of disease or disability”, however, health may also refer to “a state of fitness and ability”, or a “reservoir of personal resources that can be called on when needed” (Naidoo & Wills, 2000). Similarly, health education differs from health promotion, as it is specifically geared towards individual learning, not taking into consideration all the determinants that affect the health of individuals, groups and communities. These determinants of health are those factors that can enhance or threaten an individual’s, or a community’s, health status. The Ottawa Charter for Health Promotion (WHO, 1986) provides evidence that factors, over which an individual has minimal, or no control, requires the collective attention of a society. For this reason, five action strategies that focus on health promotion have been implemented, which are:

1. To build healthy public policy;
2. To create supportive environments;
3. To strengthen community action;
4. To develop personal skill; and
5. To reorient health services.

(WHO, 1986)

Additionally, these five action strategies on health promotion are reiterated in the Jakarta Declaration of Leading Health Promotion into the 21st century (WHO, 1997), for added emphasis.
The World Health Organisation (WHO, 2005, p. 1) emphasises the prerequisites for health as “peace, shelter, education, social security, social relations, food, income, the empowerment of women, a sustainable eco-system, sustainable resources, social justice, equity and respect for human rights”. Health promotion is, therefore, identified as a collaborative effort that exists between an individual and the environment, as well as the development of healthy public policy, leading to environmental changes that support health for all individuals in a community (WHO, 1986). Although school health programme initiatives could have a positive impact on the health of children and their behaviour, these programmes seem to be inconsistent, as they are normally guided by policies, but not implemented effectively, especially at schools (South Africa, Department of Health & Basic Education [DoH & DoBE], 2010).

Evaluators of health promotion programmes suggest that it is crucial to monitor the way in which health promotion activities are delivered, in order to determine whether these interventions are empowering and participatory, or whether they are misleading (Onya, 2007). However, less attention has been paid to the impact that schools, as organisations, as well as the community, have on the health of learners (Konu & Rimpelä, 2002). Schools have a special role to play in health promotion education in South Africa, because of its inclusion in the National Curriculum (SA, DoH & DoBE, 2010).

1.5. Promoting Health in Schools

As signed by the Departments of Health and Basic Education, the Integrated School Health Policy (SA, DoH & DoBE, 2012) has been developed to provide an Integrated School Health Programme (ISHP), under the Care and Support for Teaching and Learning (CSTL) framework of the Department of Basic Education (DoBE), as well as policies in the DBE that focus on providing “a healthier and more enabling school environment and intersect with many of the sentiments embodied in health policies and programmes”. Nine key areas for the CSTL programme have been identified for the implementation of the programme that focuses on the immediate needs of communities (South Africa, Department of Basic Education & MIET Africa, 2010). These key areas are as follows:

1. Nutritional Support;
2. Health Promotion;
3. Infrastructure, Water and Sanitation;
4. Social Welfare Services;
5. Psychosocial Support;
6. Safety and Protection;
7. Curriculum Support;
8. Co-curricular Support; and

However, this programme does not indicate how the psychosocial health and well-being of learners at schools are assessed and how school policies concerning these nine key areas of the CSTL will be monitored and improved.

Similarly, the National Centre for Chronic Disease Prevention and Health Promotion (Centre for Disease Control and Prevention [CDC], 2012) recently released a School Health Index (SHI), an elementary school version in Atlanta, Georgia, USA. This SHI is possibly the first comprehensive tool, designed specifically for schools, to assess and improve the strengths and weaknesses of their health promotion policies and programmes. The intention of the implementation of the SHI is to develop action plans to improve the overall health of learners. In contrast to the CSTL programme, the SHI consists of eight core modules:

1. Health and safety policies and environment;
2. Health education;
3. Physical education and physical activity programmes;
4. Nutrition services;
5. School health services;
6. School counselling and psychological services;
7. Health promotion for staff; and
8. Family and community involvement.
The completion of the SHI is an important measure and the first step towards improving the schools’ health promotion policies and practices (CDC, 2012). Each module consists of a questionnaire that could be completed by the team. The SHI is a 78-item questionnaire requiring participants to rate the extent to which policies and programmes are implemented on a 4-point Likert scale, with rating levels ranging from ‘fully in place’ to ‘not in place’, that calculates a total score for each module (CDC, 2012). Comprehensive explanations on the various rating levels for the questions of each module could be used to interpret the results, in order to develop appropriate action plans for improvement (CDC, 2012).

The SHI, therefore, could serve as formal documentation for health promotion activities in a school setting; however, it should not be used to compare schools or evaluate the staff, but should only be used as a self-assessment and planning tool for community-organising and educational processes (CDC, 2012). The CDC further suggests that, most importantly, the completion of the SHI is a group effort, and before administering the SHI, a School Health Index team should be formed (CDC, 2012). The responsibility of this team would be to complete the SHI. The strength of administering the SHI comes from the interaction of different individuals, who form part of the school community, namely the school health council, or a new subcommittee of the school management council/governing body (CDC, 2012). These stakeholders need to form strategies to improve school policies and programmes, as the interaction and communication among the SHI participants are the most important outcomes for meaningful assessment, planning and implementation of this process (CDC, 2012).

1.6. Problem Statement

Research, conducted both internationally and locally, indicate that Early Childhood Development (ECD) is an important developmental phase for children, from birth to nine years of age (SA Department of Social Development, 2006), because it is characterised by rapid growth and development, either enhancing, or hindering, development and learning abilities across the lifespan (Biersteker, 2010; Walsh & Petty, 2007, p. 301). According to Dodge (2007), the success of ECD depends on the interaction of factors, such as good health between children and parents, good nutrition, strong social support, good parenting and the
adequate stimulative interaction with individuals in the community. However, according to Huang et al. (2012), very little research has been done to identify the contributors to developmental outcomes in young children, during the stages of infancy and early childhood development, taking into account disadvantaged surroundings and multiple environmental contexts.

A study conducted by McCain, Mustard and Shanker (2007) indicates that poor ECD affects the mental and physical health, as well as learning ability of an individual, later in life. In addition, Khomsan et al. (2013) assert that psychosocial stimulation is the educational stimulation that aids the development of children’s cognitive, physical, motoric and socioemotional abilities. A huge difference exists between South Africa and developed countries, regarding a standard approach to assess psychosocial health and well-being in ECD. Dawes et al. (2004a) assert that there has been a lack of focus on child health, which has a detrimental impact on the psychosocial health and well-being of children, particularly in South Africa. According to the Ottawa Charter of Health Promotion (WHO, 1986), health promotion is “the process of enabling people and communities to increase control over factors that influence their health, and thereby improve their health”. Through health promotion, the school environment provides a perfect opportunity to promote psychosocial health and well-being among learners. Currently, there is very limited information reported on health promotion in schools, regarding:

(i) school policies;

(ii) the physical and social environment of the school;

(iii) the school curriculum;

(iv) community links; and

(v) health services.

This is a problem, especially, as schools are considered one of the key settings shaping the psychosocial health and well-being and development of children, interdependently (Zubrick et al., 2000).

Additionally, research reveals that psychosocial skills are essential to early engagement and learning (Denham, 2006; Raver, 2002; Thompson & Raikes, 2007). A SchoolHealth Index
Score Card (SHISC) could, therefore, be useful in the development of an action plan to improve the assessment of the psychosocial health and well-being of learners. The implementation of the SHISC could involve teachers, parents/primary caregivers, learners and the community, which could improve school policies, programmes and other services, as well as strengthen the relationship between the school and the family concerned, regarding the importance of the psychosocial health and well-being of learners, in ECD. Therefore, the purpose of this study is to design a School Health Index Score Card to assess the psychosocial health and well-being of learners in ECD, at South African primary schools.

1.7. Research Questions

1. What is the status/level of psychosocial health and well-being of learners in ECD at primary schools?

2. What were the instruments, and how were they used, in previous research studies to assess the psychosocial health and well-being of learners in ECD at primary schools?

3. Would a School Health Index Score Card be effective in the assessment of psychosocial health and well-being in ECD at primary schools?

4. What are the current health promotion practices in ECD at primary schools?

1.8. Aims and Objectives

1.8.1. Aim of the study

The aim of the study is to design a School Health Index Score Card to assess the psychosocial health and well-being of learners in ECD at primary schools.

1.8.2. Objectives of the study

The objectives of the study are to:

1. Explore the current guidelines used to assess the psychosocial health and well-being of learners in ECD at primary schools;

2. Systematically review previous studies to identify the instruments used to assess psychosocial health and well-being in ECD at primary schools;
3. Design a School Health Index Score Card (SHISC) for primary schools, to assess the psychosocial health and well-being of learners in ECD; and

4. Examine the current health promotion practices in ECD at primary schools;

1.9. Significance of the Study

The results of this research study could assist the South African government, policy makers, principals, teachers, public sectors and community members, at various levels, to become involved in enabling health promotion, by focusing on the psychosocial health and well-being of the child, at primary school level, as well as the broader community. With innovative thinking about collaborating to achieve health promotion and disease prevention objectives for primary school children, this study elaborates on the concept of psychosocial health and well-being, by implementing a School Health Index Score Card (SHISC). The SHISC focuses on the promotion of psychosocial health, well-being and safety among primary school learners, which forms an integral part of the mission of schools. The SHISC provides knowledge and skills that learners require to become healthy and productive adults. Using a SHISC could help to (i) assess and improve the psychosocial health, well-being and safety of learners, (ii) increase the capacity of the student’s ability to learn (iii) decrease absenteeism and (iv) improve physical fitness and mental alertness. The SHISC could serve as a self-assessment tool and framework for South African primary schools, through which the programmes and policies of the school could be assessed, to improve the psychosocial health and well-being of learners in ECD. This would significantly add to the optimal development and academic success of children, across their life span. The SHISC could also serve as a guide to identify the strengths and weaknesses of school policies and practices, which could lead to the development of action plans for improvement, should weaknesses be detected.

1.10. Definitions of terms for this study

- **Early Childhood Development:** is an “umbrella term that applies to the processes by which children from birth, to at least 9 years, grow and thrive, physically, mentally, emotionally, spiritually, morally and socially” (South Africa, Department of Education, [DoE], 1996).

- **Health Promotion:** refers to “any planned combination of educational, political,
environmental, regulatory or organisational mechanisms that support actions and conditions of living, conducive to health of individuals, groups and communities” (Joint Committee, 2001, p. 101), and is “the process of enabling people to improve health” (WHO, 1986).

- **Health Education:** “comprises consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge and developing life skills, which are conducive to individual and community health” (WHO, 1998, p. 4).

- **Health:** refers to “a resource for social economic and personal development and an important dimension of quality of life” (WHO, 1986).

- **Learners:** are school-aged children attending schools and other structured learning sites (South Africa, Department of Health [DoH], 2002). School-aged child are “children of school going age, who are generally between the ages of 6 and 18 years…” (SA, DoH, 2002).

- **School community:** refers to “…the entire community involved both directly, or indirectly, with a learning site or school setting, namely learner, parents/caregivers, educators, school management members…” (SA, DoH, 2002).

- **School Well-being Model:** is “a model that has been developed fit for a school setting, by applying the current literature on school health and school evaluation” (Wolfe, 1985; Symons, Cinelli, James & Groff, 1997).

- **Systematic review:** is “a review that strives to comprehensively identify, appraise, and synthesise all the relevant studies on a given topic” (Petlicrew&Roberts, 2006).

- **School Nurse:** throughout this document, a school nurse refers to a health worker, who has been trained with the necessary skills to provide school health services (SA, DoH, 2002).

### 1.11. Chapter Outline of the Thesis

The following chapter outlines describes the study in detail and includes previous international and national literature and research, the methodology used, as well as the findings. It crucially closes with a summary of the findings and a conclusion of the study, which aims at the
recommendation of policy formation, regarding the School Health Index Score Card.

**Chapter 1** covers the background and rationale of the study and introduces the problem statement. It provides an overview of the legislation concerning ECD, programmes addressing ECD, conceptual framework, theory and model, as well as the research questions, the aim and objectives of the study. It concludes with the significance of the study, the definitions of terms and the chapter outline of the thesis.

**Chapter 2** includes an overview of the literature on ECD, psychosocial health and well-being of children in ECD, the importance of investing in ECD, health promotion programmes and services, legislation and the psychosocial stages of Erik Erikson, followed by the School well-being model.

**Chapter 3** comprises the research methodology of the study. The study is conceptualised in two phases. Each phase consists of two stages and has its own methodological framework and design, which addresses the objectives of the study. The phases of the study are “built” on each other to reach the desired outcome. Research setting, population and sampling, data collection, as well as the framework used, is discussed in this chapter.

**Chapter 4** covers the methodology used in the quantitative assessment in the study. The quantitative data of the study is analysed by means of the Statistical Package in Social Sciences (SPSS) to provide information in terms of percentages, frequencies, means and standard deviation.

**Chapter 5** presents the methodology used for the qualitative assessment of the study. The researcher adopted a participatory-action research approach, in which development and research processes work together, with co-operation between the researcher and the participants. Thematic analysis was employed to provide the qualitative findings, based on the statements of teachers/participants.

**Chapter 6** describes the systematic review that was used to identify literature pertaining to the instruments that were previously used to assess psychosocial health and well-being in ECD at primary schools. This chapter concludes with a discussion section that captures the use of the review information, in order to design the School Health Index Score Card. This chapter forms part of Phase one of the study, the baseline assessment. Phase one includes two
stages – Stage 1 is a baseline assessment, while Stage 2 is a systematic review, using mixed method methodology. The findings of Stage 2 are presented in chapter 7.

**Chapter 7** encompasses a discussion on the design of the School Health Index Score Card procedure, which forms Stage one of Phase two. For this phase, data was obtained from relevant stakeholders in ECD at primary schools, concerning the policies, systems and services available to learners. The draft School Health Index Score Card is assessed in a Focus group discussion to explore whether the scorecard addresses all domains of psychosocial health and well-being of learners in ECD and to identify any problems and omissions. The feasibility of the School Health Index Score Card is examined by means of a Delphi study (Phase 2, Stage two), which is conducted with the relevant stakeholders.

**Chapter 8** provides the researcher’s summary on the integration of the findings, limitations and conclusion of the study, which targets the recommendation of policy formation regarding the School Health Index Score Card. In this chapter, the researcher provides more insight into effectiveness of the School Health Index Score Card for children in ECD at primary schools in South Africa.
CHAPTER TWO

CONCEPTUAL FRAMEWORK

2.1. Introduction

In this chapter, the researcher explores the conceptual framework of this study, for the purpose of building a theoretical understanding of psychosocial health and well-being in ECD at primary schools in South Africa, as well as health promotion. The chapter is divided into two sections. In the first section, Early Childhood Development (ECD) is defined, followed by a discussion on the Psychosocial Theory of Human Development. In addition, previous research, conducted on the fundamental rights to health and education of children in ECD, is explored, followed by the various psychosocial domains in ECD. The importance of the early development of the brain is examined in relation to the current, relevant threads of literature, followed by the importance of investing in ECD. Research conducted on the importance of Psychosocial health and well-being of children in ECD is discussed in-depth, including the knowledge and perceptions that parents and teachers hold on the subject. Section one concludes with a review of literature on the development of contextually appropriate measures to assess psychosocial health and well-being of children in ECD.

In the second section, an overview of literature, conducted both internationally and nationally, concerning health promotion, health promotion programmes and policies is provided. A discussion follows that promotes Schools and Early Childhood Centres as ideal settings for health promotion. The School Well-Being Model, which serves as the basis and framework for this current study, is presented. This model takes into account the importance of the various interacting and interdependent domains of influence, which are instrumental in promoting psychosocial health and well-being of children in ECD.

SECTION ONE

2.2. Early Childhood Development

Early Childhood Development (ECD) refers to “a comprehensive approach to policies and
programmes for children from birth to nine years of age, with the active participation of their parents and caregiver” (SA, DoE, 2001, p. 5). The purpose of this comprehensive approach is to protect the right of children to develop to their full cognitive, emotional, social and physical potential (South Africa, Department of Education [DoE], 1995). This fundamental and universal human right of children to optimal development is recognised in the Constitution of South Africa (Act 108 of 1996).

ECD is used as an ‘umbrella term’ for the “processes by which children, from birth to nine years, grow and thrive, physically, mentally, emotionally, morally and socially” (New & Cochrane, 2007; Chürr, 2012). Three phases that define ECD, in its broader spectrum, are recognised by the National Integrated Plan for Early Childhood Development in South Africa (United Nations International Children’s Emergency Fund [UNICEF], 2005, p. 3). These phases are; from birth to three years of age; three to six years; and six to nine years of age (UNICEF, 2005, p. 3). Similarly, the most important developmental phases for children, according to the Department of Social Development (SA, DSD, 2006), the Department of Health (SA, DoH, 2004) and the Department of Education (SA, DoE, 2008) in South Africa, are from birth to four years of age, from birth to seven years of age, and from birth to nine years, respectively.

However, the importance of the early developmental phase is recognised as a very fundamental phase by all three Departments in South Africa, and special attention is focused on the specific needs of this phase (Storbeck & Moodley, 2010). This focus also includes the impact of the family, community and environment on the child’s psychosocial health, well-being, nutrition and academic achievements (SA DoE, 2001, p. 5). In order to understand the development of a child in context, it is important to understand the influence of the family, friends and society on the optimal development of the child, as well as those factors that could hinder the child’s experience of complete psychosocial health and well-being in the early phases.

The basic needs of children for optimal development, as well as psychosocial health and well-being, are further explored and explained in Erikson’s Psychosocial Theory on human development (Erikson, 1950). Erikson’s revision of the Freudian Theory has become one of
the most appreciated and utilised theories in human development over the past decades. His theory of human development has had a substantial impact on child development, and has influenced ideas and practices in nursing, school counselling, adolescent information and the diagnosis of personality disorders in adolescents, as well (Studer, 2007; Wadenstein, 2006; Trueman & Parker, 2006).

2.3. Psychosocial Theory of Human Development

Erik Erikson (1950), in his proposed Theory of Psychosocial Development, believed that development occurs in a series of stages throughout the life span. For the purpose of this study, psychosocial development refers to a child’s psychological and social development, associated with Erikson’s characterisation of personality growth and development, which stresses the interaction between the child and his/her physical, as well as social environments. The Psychosocial Theory of Erikson (1950) is rooted in the Psychoanalytic Theory of Sigmund Freud. Freud was a psychoanalyst, who believed that the psychological change of an individual originated from feelings, impulses and fantasies (Freud, 1938). According to Morrill (2009), Freud proposed that human nature sought pleasure (which he termed libido, or sexual energy) and avoided pain. Morrill (2009) asserts that, while Freud focused on the psychosexual sources of the development of human nature, Erikson focused on the maturational and social influences of an individual.

Erikson’s theory describes the impact of social experiences across the whole life span and also provides insights into the formation of a healthy personality. His theory includes eight stages of development. The first five stages of Erikson’s theory – namely, trust, autonomy, initiative, industry and identity (Erikson, 1950) – corresponds directly to the first five stages of Freud’s psychosexual stages – namely, oral, anal, phallic, latent and genital (Sorell & Montgomery, 2001). Each stage is characterised as a crisis, or social conflict, with two opposite outcomes – one being positive, or syntonic, and the other being negative, or dystonic (Erikson, 1950). According to Erikson (1950), when an individual finds a favourable balance between the two possible extremes in a stage, this individual will gain a specific strength to his/her ego. He is of the opinion that the ego strength gained in one stage is important for the individual to find a favourable balance between opposing outcomes in each stage, thereby gaining the strength to his/her ego, which is associated with the success of each stage,
throughout the entire life cycle (Erikson, 1950; Erikson, 1982).

Although these stages are not generally dreadful situations, they require solutions that are satisfying, both personally and socially. According to Erikson, each stage must be resolved before a child can transcend to the subsequent stage in their development (Erikson, 1950; Erikson, 1982). He believed that the failure to complete any one stage would lead to the inability of completing subsequent stages. By providing social opportunity and support, the child’s primary caregiver and teacher could help him/her to overcome each crisis, by recognising the importance of their role/s in each stage. Table 2.1 indicates the first four stages of psychosocial development for the early childhood years. Erikson (1950), states that each stage of psychosocial development has a corresponding basic strength.

### Table 2.1.: Psychosocial stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Age Range</th>
<th>Basic Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust vs mistrust</td>
<td>Birth to 1 year</td>
<td>Hope</td>
</tr>
<tr>
<td>Autonomy vs shame and doubt</td>
<td>1-3 years</td>
<td>Will</td>
</tr>
<tr>
<td>Initiative vs guilt</td>
<td>3-6 years</td>
<td>Purpose</td>
</tr>
<tr>
<td>Industry vs inferiority</td>
<td>6-12 years</td>
<td>Competence</td>
</tr>
</tbody>
</table>

Note: Adapted from Stonehouse, 1998

#### 2.3.1. Trust vs Mistrust: Age – Birth to 1 year: Basic Strength – Hope

Erikson’s first stage of psychosocial development occurs between birth and the age of one year. This stage of psychosocial development is seen as the most fundamental stage in the life of a child (Erikson, 1950). This stage is characterised by an infant in the early stages of his/her development, who is entirely dependent on the primary caregiver for food, love, shelter, warmth, safety, and nurturing. An infant develops a sense of ‘attachment’ to his/her caregiver within the first year and is, therefore, capable of having emotional control. Infants and toddlers that experience secure attachments with their caregivers, use the emotional and physical security provided, as a foundation from which to explore things and people in the environment. Children, therefore, will start to gain competence and self-confidence, when they have mastered their environment (Hertzman, 2000). It is during the early years that children develop the most important
elements of emotional intelligence, as well as the ability to communicate within others (SA, DoE, 2001, p. 3).

A strong foundation for lifelong learning is, therefore, established in the early phase of the child’s life (UNESCO, 2006). The child’s personality is also shaped by the quality of care that s/he receives from his/her caregiver/s. It is during this stage that children learn to trust and depend on their caregivers to provide them with adequate care and love. However, if the need of the child is not met during this stage of his/her life, the child will develop a sense of mistrust that caregivers cannot be depended on or trusted.

Children will also develop mistrust when their caregivers are emotionally uninvolved, dismissive and fail to provide them with a sense of belonging. However, children will successfully develop trust in their caregivers, if their needs are consistently met, as they will experience a sense of safety and security in their social environment. Erikson also maintains that, in order for children to develop successfully, there has be a balance between trust and mistrust. Children will develop a sense of hope and confidence, when a balance between the opposing sides are met. Therefore, children will not experience any hope in their interactions with their social environment, until they have learned the meaning of trust (Erikson, 1950).

2.3.2. Autonomy vs Shame and Doubt: Age – 1-3 years: Basic Strength – Will

Children can only learn to be independent, if they have learned to trust in their own abilities and their interaction with their environment. During this stage, children develop a greater sense of personal control and start to experience independence. Children will start to perform basic functions on their own, by making simple decisions about their preferences (Erikson, 1950; 1965). Caregivers, therefore, can assist children to gain control over their own decisions, for example, in food choices, type of clothing they want to wear, or toys they want to play with. It is through making their own choices that children develop a sense of autonomy and independence. When children are supported by their caregivers in decision-making, they will experience a sense of security and confidence (Erikson, 1950; 1965).
However, a lack of support by the caregiver in decision-making will create a sense of inadequacy and self-doubt in the child, which could hinder optimal development in Early Childhood Development. In order for children to experience independence, it is important that caregivers provide children with a clear set of boundaries, while still supporting them in a positive way. Erikson (1965) asserts that, when a balance is achieved between autonomy, on the one side, with shame and doubt, on the other, the outcome is a basic strength of will, meaning that the child gains confidence, when s/he is allowed to experience independence of the self.

2.3.3. Initiative vs Guilt: Age – 3-6 years old: Basic Strength – Purpose

This stage of psychosocial development occurs during pre-school years. Erikson (1950) asserts that during this stage, children develop a sense of initiative, and start to assert power and control through their interaction with others in their social environment. The social environment is a fundamental determinant of Early Childhood Development, and the early years of a child is very crucial for the development of basic skills, across the life span (Zeanah, Stafford, Nagle & Rice, 2005). Children prepare themselves to take on leading positions among those with whom they interact. They show their ability of power and control, and feel capable of leading others. While taking the initiative to lead others, children could become frustrated when they are unable achieve the desired outcome, which could develop a sense of guilt, self-doubt and lack of initiative. Erikson (1959) asserts that children are in need of encouragement and support from their primary caregivers, in order to develop a sense of initiative, which will outweigh their sense of doubt and guilt. He claimed that, when a balance is achieved between initiative and the willingness to interact with others, children will develop a sense of purpose in their lives.

2.3.4. Industry vs Inferiority: Age – 6-12 years old: Basic Strength – Competence

As children spend most of their time at school; schools play an integral part in Early Childhood Development. Children form social relationships through interaction with their teachers and peers. It is during this stage that children develop a sense of pride and competence in their ability to accomplish complex tasks. However, children, who receive no attention from their caregivers, teachers and peers, would doubt their ability to be successful, which could lead to them experiencing a sense of inferiority among...
Erikson claimed that children could become competent in their own ability to complete tasks, if they are supported and encouraged by their caregivers, teachers or peers. In order for children to thrive, holistically, it is very important that they are reared in supportive and stimulating surroundings, whether at home, school, church or the community. Zambo and Hansen (2007) suggest that adults need to know and understand the importance of contributing to the psychosocial health and well-being of children in their early years. These contributions, therefore, could serve as assisting children to obtain their independence as fully functioning individuals in any society; it is the collective responsibility of parents/caregivers, family members, and society to ensure that children develop optimally across all spheres of life. This responsibility is envisioned in the National Development Plan [NDP] 2030 of South Africa (National Planning Commission, 2011), together with all relevant government departments, private institutions and non-governmental institutions.

2.4. National Development Plan 2030 and ECD Services

The National Development Plan (NDP) 2030 (National Planning Commission, 2011) identified that the lives of many children in South Africa was a constant struggle from a very young age because of disparities in quality ECD services. According to the NDP, apart from health care services, ECD services below Grade R (reception year) are mostly provided by private for-profit operators, community-based organisations and large non-governmental organisations (NGO’s). Currently, however, because the quality and provision of ECD services for children aged 0–4 is extremely poor, Grade R is the strongest element of preschool learning and support, linking ECD services to primary schools. The vision set by the NDP (National Planning Commission, 2011, p. 297), therefore, is to intervene in this early phase of children’s lives, in order for them to benefit, grow and develop emotionally, cognitively and physically. The benefits of early intervention for children are set out as follows:

- Better school enrolment rates, retention and academic performance;
- Higher rates of high school completion;
• Lower levels of antisocial behaviour;
• Higher earnings; and
• Better adult health and longevity.

Additionally, the NDP indicates that interventions should vary for children of different age groups. Children from birth to three years of age would be best served through clinic-, home- and community-based programmes that focus on working with families; while children aged four–five years would benefit from more structured learning in group programmes. According to the NDP, registered ECD centres are also not strategically distributed to reach the most vulnerable and poor children, especially in rural areas, as ECD services are still privately provided. In addition, the fees that are payable for ECD services precludes children from poor families from making use of the available services. Therefore, it is the vision of the NDP, with the support of government, to expand ECD programmes to reach these vulnerable children, as well as children with disabilities. The NDP asserts that ECD services should be flexible and able to respond to the need of children, families and communities.

Ultimately, it is the responsibility of the state to ensure that all vulnerable families receive a comprehensive package of ECD, as the provision and monitoring of ECD services is the core responsibility of the Department of Basic Education. In addition, the NDP is aligned with the Department of Basic Education’s Action Plan and Vision for Schooling in 2025 (South Africa, Department of Basic Education, 2011), regarding policies and the standardisation of the guidelines, norms and standards for ECD programmes.

Since the cessation of Apartheid in 1994, various legislation policies and programmes for ECD have been designed to address the basic needs and rights of children in South Africa (Chürr, 2012). The main purpose of these policies is to protect the rights of children, while allowing them to develop to their full cognitive, emotional, social and physical potential, taking into account all the aspects of child growth and development (South Africa, Department of Education, [DoE] 2001, p. 5; Chürr, 2012). These policies and programmes also highlight the children’s need of a good foundation for psychosocial functioning in the future (SA, DoE, 2001; United Nations International Children’s Emergency Fund[UNICEF],
2.5. **Fundamental rights to Health and Education in ECD**

2.5.1. **Department of Basic Education**

The primary role of the Department of Basic Education is to recognise the need for national, provincial and local ECD strategies, in collaboration with other core departments and civil society (UNICEF, 2004, p. 15). In order to guarantee the rights and promote the optimal survival and development of children, the South African Constitution (Act No. 108 of 1996), Section 29 on Education (1)(a)(b) clearly indicates that “Everyone has the right - (a) to a basic education, including adult basic education”; and (b) “to further education, which the state, through reasonable measures, must make progressively available and accessible”. Article 11 of the African Charter for the Rights and Welfare of the Child [ACRWC] (Organisation of African Unity[OAU], 1990) also states that (1) “Every child shall have the right to an education”, and (2) (a), The education of the child shall be directed to “the promotion and development of the child's personality, talents and mental and physical abilities to their fullest potential”. The United Nations Convention on the Rights of the Child [UNCRC] (UN, 1989), however, stipulates that children have the right to survival, development, protection and participation, irrespective of their age. These rights are fundamental and are some of the most essential principles of the UNCRC, which can only be implemented and effective when all other provisions of the UNCRC are met (Woodhead, 2005; Storbeck & Moodley, 2010).

2.5.2. **Department of Health**

One of the goals of NDP2030 (National Planning Commission, 2011) is to address the social determinants that affect health and disease. According to the NDP 2030 (National Planning Commission, 2011), a comprehensive approach to the early phases of life should be implemented, with interventions aimed at the social/emotional and language/cognitive development of children in ECD. The NDP 2030 (National Planning Commission, 2011) also indicates that the health sector should engage with partners and other departments, to ensure that the impact of certain policies with negative health outcomes, is understood and mitigated, and that policies, resulting in
positive health outcomes, is promoted. The need of basic health care for children, as one of the fundamental human rights in the South Africa Constitution (Act No. 108 of 1996), is stipulated in Section 28(1)(c) as, “every child has the right to basic nutrition, shelter, basic health care services and social services”, while the ACRWC (OAU, 1990), Article 5 specifies that “every child has an inherent right to life. This right shall be protected by law”. Similarly, Section 91(2) of the Children’s Act of the Republic of South Africa (Act No 38 of 2005) stipulates that:

“Early Childhood Development services means services –

a. intended to promote Early Childhood Development; and

b. provided by a person, other than a child’s parents or care-giver, on a regular basis to children up to school-going age.

Although health is everyone’s responsibility, the NDP 2030 (National Planning Commission, 2011) suggests that the school is the best place to instil changes in lifestyles, behaviour and health promotion. As poverty is recognised as a significant determinant of health in ECD that needs to be addressed, the Department of Health, therefore, must collaborate with those departments, whose mandate has a direct impact on alleviating poverty. In South Africa, one such department is the Department of Social Development.

2.5.3. Department of Social Development

The Department of Social Development has developed guidelines for ECD services, by setting minimal standards for the provision of ECD services in South Africa, thereby indicating the importance of ECD services, as well as the roles and responsibilities of this department (SA, DSD, 2006). The South African Constitution (Act No. 108 of 1996) emphasises in Section 28(2) that “the best interest of the child are important” and in Section 27, Health care, food, water and social security. (1) “Everyone has the right to have access to (a) health care services, including reproductive health care; (b) sufficient food and water; and (c) social security, including if they are unable to support themselves and their dependants, appropriate social assistance”. Section 26(1) Housing, indicates (1) that “Everyone has the right to have access to adequate housing”. The quest to develop appropriate indicators and measures for psychosocial health and well-
being in early childhood, therefore, is of great importance, and crucial for future childhood development (Mustard & Young, 2007; Britto, Kagan & Brookes-Gunn, 2003). In order to promote a safe, stable, caring and supportive environment for children in early childhood, policies on early care and education primary health care, child protective services, adult mental health, and family economic supports need to be implemented.

2.6. Domains of Early Childhood Development

A long and healthy life is globally recognised as a key indicator of the well-being of humans (Mustard & Young, 2007). This study uses the following interrelated domains, namely cognitive, socio-emotional, linguistic and physical, as indicators of early childhood well-being. These domains, also referred to as psychosocial domains, are interconnected and, therefore, co-dependent (WHO, 1948). Understanding the interaction of all these developmental domains is crucial to addressing early childhood needs.

Research, conducted in Bangladesh recently, found psychosocial stimulation to be as equally important for motor skills development as good nutrition. It also revealed that the physical growth of children older than six years was highly dependent on hormonal secretions, triggered by affection and social interaction (Zeanah, Smyke, Koga, Carlson & the BEIP Core Group, 2005). However, similar research found that failure to invest in ECD could result in developmental delays and disability, thereby obstructing the optimal development of children throughout their entire lifespan (UNICEF, 2001). In an attempt to better understand how the development of children is influenced, the researcher provides a detailed explanation of these interrelated domains.

2.6.1. Cognitive development

Cognitive development, in relation to the acquisition of analytical skills, mental problem-solving, memory and early mathematical abilities in ECD, is very important (Chürr, 2012). Early cognitive development for infants and toddlers involves problem-solving, such as learning to stack or nest objects, as well as the early understanding of arithmetic, demonstrated by such behaviours as the sorting of objects and knowing what ‘one’ or ‘two’ of something means (Naudeau, Kataoka, Valero, Neuman & Elder,
Their studies indicate further that, by the age of 3 years, children should be capable of solving simple puzzles, matching colours or shapes, as well as showing awareness of concepts, such as ‘more’ and ‘less’ (Naudeau et al., 2011). Furthermore, when children approach school going age, their cognitive development is broadening their scope to the early knowledge of numbers, which includes adding and subtracting, as well as being familiar with the letters of the alphabet and printing (Naudeau et al., 2011).

2.6.2. Socio-emotional Development

The term, socio-emotional development, refers to the psychosocial concept that describes the social, emotional and mental, as well as motor domains of children in the early development phase (UNICEF, 2001, p. 8). What constitutes psychosocial health and well-being lies in the definition of health established by the World Health Organisation (WHO, 1948), which defines health as a “state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity”. However, the individual is limited by this definition as it does not consider the environment in which s/he lives (Bolívar, Daponte, Rodríguez & Sánchez, 2010).

Early child development, therefore, is largely dependent on love, physical and verbal stimulation, and play (Hansen & Zambo, 2007). Socio-emotional development is crucial in the first three years of a child’s life because this phase focuses on the parent-child relationships, which set the stage for his/her future well-being (Gonzalez-Mena, 2006). This phase is also characterised by the manner in which children build trusting relationships with parents and/or caregivers, in order to meet their daily needs (Guajardo, Snyder & Petersen, 2009). Psychosocial health and well-being in this early phase will contribute to the success and happiness of children throughout their entire lives (Erikson, 1965).

Children experience love through interaction with their parent/caregivers, siblings and family members; this allows them to be confident and competent to obtain certain skills in life. Children, who are well nurtured and cared for, will thrive to be the best they can
be. However, a lack in nurturing could have long-lasting effects on the development of children (Scarborough, Hebbeler, Simeonsson & Spiker, 2007). In addition, psychosocial development in the preschool years builds on previous achievements, which includes social competence (getting along with others, including peers and teachers), behaviour management (following directions and cooperating with requests), social perception (identifying thoughts and feelings in oneself and others), and self-regulatory abilities (having emotional and behavioural control, especially in stressful situations) (Naudeau et al., 2011). Fernald, Kariger, Engle and Raikes (2009) refer to the acquisition of psychosocial skills and cognitive processes as “executive function processes”. These processes include impulse control, the ability to initiate action, the ability to sustain attention, and persistence. According to Fernald et al. (2009), all these processes are most likely to have a significant influence on the capacity of an individual to succeed in life. In order for children to thrive optimally in their early years, they need to possess all the prerequisites, such as emotional and physical health, social skills and cognitive/linguistic capacities, which will ensure their academic achievement and success in later years (Shonkoff, Boyce & McEwen, 2009; Shonkoff & Phillips, 2000; Thompson & Raikes, 2006).

2.6.3. Linguistic Development

Various studies have found that the early childhood years are critical to a child’s literacy development, as the development of language and literacy starts at birth and is an on-going process throughout life (Baroody & Diamond, 2010; Bennett, Weigel & Martin, 2002; Harding & Golinkoff, 1979). According to Harding and Golinkoff (1979), language develops both receptively and expressively through reading, listening, writing and speaking. In addition, these authors assert that children must learn the elements, rules, structure and the conventions of the school and society, in order to become fully functioning members of that particular environment. Their study also indicates that children learn to communicate long before they develop the form and content of language. The development of language manifests itself through babbling, pointing and gesturing in infancy, with the first words and sentences emerging in toddlerhood, and an explosion of words between the ages of two and three years (Naudeau et al., 2011). Sachs (2001) positsthat, although infants are unaware of the impact of this pre-
linguistic behaviour, the consistent and continuous responses of the primary caregivers, during early protoconversational exchanges, highlight and teach the communicative nature of language.

Naudeau et al. (2011) also assert that it is crucial for parents/caregivers to verbally interact with children from birth, as their capacity to absorb language and differentiate between sounds, peak at nine months of age, way before they are able to talk. Children learn communicative competence, or how to appropriately and strategically use language in social situations, through the frequent interaction with the family, peers, teachers and primary caregivers (Hymes, 1967).

Children, therefore, develop linguistic ability – namely, the production and understanding of words, the ability to tell stories and identify letters, as well as comfort and familiarity with books – when they move into preschool years (Naudeau et al., 2011). The collaborative commitment to language stimulation of children, both at home and in the classroom, have enduring effects on their cognitive, social and linguistic development (Mashburn, 2008).

2.6.4. Physical Development

Grantham-McGregor et al. (2007) define physical development as “an individual’s rate of growth, physical fitness, fine motor skills, gross motor skills, and self-care abilities; it can be affected by the presence of chronic conditions, such as diabetes, disability and malnutrition”. Their study also found that the prevalence of stunting (chronic undernutrition, as measured by height-for-age Z-score, less than or equal to −2), in children between birth and the age of 2 years, is particularly important, as it reflects the prevalence of undernutrition in a given population of children, which, in turn, is predictive of low cognitive and overall development in early childhood and later in life. UNICEF (2001) indicates that stunting in the early development phases leads to irreversible damage later in life, which could result in lower educational outcomes.

2.7. Early Development of the Brain

A study conducted by McCain, Mustard and Shanker (2007), revealed that an important
aspect of physical growth is the development of the brain and nervous system. Their studies indicate that the number and size of the brain’s nerve endings continue to grow, at least until adolescence. Szyf, McGowan and Meaney (2008) assert that the reason behind some of the brain’s continued growth is due to a process called myelination; during this process many cells of the brain and nervous system are covered with an insulating layer of fat cells that increase the speed at which information travels through the nervous system. For example, myelination, in the area of the brain related to hand-eye coordination, is not complete until about four years of age. Myelination is also crucial to the area of the brain related to the focusing of attention, and is not complete until the end of the elementary-school years (Lloyd & Hertzman, 2009; Wylie, Hodgen, Ferrall & Thompson, 2006).

Early childhood is characterised by the formative developmental changes that a child’s body and mind are exposed to; the first two to three years are extremely important (Irwin et al., 2007). Current research suggests that half of an individual’s intelligence potential is formed by the age of four years (Alwin & Wray, 2005). Research also reveals that children, who were exposed to good nutrition and adequate psychosocial stimulation, displayed better brain functioning, when measured at the age twelve years, than those who were raised in a less stimulating environment (World Bank/Consultative Group on ECCD, 2000).

Early childhood intervention, therefore, could have a lasting effect on the intellectual capacity, personality and the social behaviour of an individual across the lifespan (World Bank/Consultative Group on ECCD, 2000). Mustard (2010) suggests that the early years of the development establishes the basic architecture and the function of a child’s brain, therefore, the development of the child is critical during the early childhood phase. According to Shonkoff et al. (2009), brains are built over time, from the bottom up, and the basic architecture of the brain is constructed through an on-going process, which starts in-utero and continues into adulthood. According to Bourgeois (1997), as well as Huttenlocker and Dabholkar (1997), 700 new neural connections are formed every second in the first few years of a child’s life. These connections are reduced through pruning so that the circuits of the brain can become more efficient (National Scientific Council on the Developing Child, 2007). Shonkoff and Phillips (2000) aver that these connections proliferate and prune in a prescribed order, with later, more complex brain circuits being built upon earlier, simpler
circuits. Research reveals that the human brain is the major organ of development; however genetically programmed sensitive periods occur, when the developing child is disproportionately sensitive to external and environmental influences (Haq, 2013).

A similar study conducted by Shonkoff et al. (2009) reveals that the interactive influences of genes and experience shape the developing brain in the early phases of life. However, these authors caution that the quality of the architecture of the brain could be affected by these experiences, giving rise to either a solid, or fragile, foundation for learning, health and behaviour throughout the life of a child. In addition, when the brain matures, it becomes more specialised, to undertake more complex functions, and less capable of reorganising and adapting to unexpected, or new challenges (Shonkoff et al., 2009). For this reason, poor development could affect the psychosocial health and well-being of children throughout their entire life (Mustard, 2007).

2.8. The importance of investing in ECD

Research reveals that investing in early childhood could reduce the need for public welfare expenditures later, minimising the social and financial costs associated with grade repetition, juvenile delinquency and drug use (World Bank/Consultative Group on ECCD, 2000). Early development of psychosocial health and well-being has been positively linked to academic achievement in developed countries (Currie, 2009). Many countries are investing in ECD, in an endeavour to secure the socio-economic, educational and psychosocial health and well-being of a future society. The ECD phase is not only crucial for lasting psychosocial health and well-being, but also serves as a means of reducing intergenerational transmission of poverty, experienced by children all over the world (Grantham-McGregor, Cheung, Cueto, Glewwe, Richter & Strupp (2007).

Although progress has been made by some governments to prioritise ECD in their health, education, poverty reduction or other national plans, many countries are still lethargic in developing policies, strategic plans and laws (Grantham-McGregor et al., 2007). Grantham-McGregor et al. (2007) suggest that, in developing countries, approximately 219 million children under the age of five years are disadvantaged, which is 39% of all children (559 million) under this age in developing countries. This study also shows that Sub-Saharan
Africa has the highest prevalence of disadvantaged children younger than 5 years old, followed by South Asia, 61% and 52% of all under 5-year-old children in those respective countries (Grantham-McGregor et al. 2007).

However, according to Frank (2006, cited in Chürr, 2012), investing directly in ECD could have numerous positive outcomes, such as:

- Increased emotional or cognitive development of children;
- Improved parent-child relationships and better interaction between them;
- Improved progress, related to educational processes and outcomes for children;
- Enhanced economic independence;
- Reduced dependence on welfare, and higher incomes;
- Diminution of criminal activity; and
- Enhanced health related indicators, related to child mistreatment and abuse, maternal reproductive health and substance abuse.

ECD, therefore, could provide a “primary point of intervention against the prejudices and discrimination that have been endemic in South African society” (Chürr, 2012). However, the challenges of ECD, as indicated by Dodge (2007), depends on the interaction of the following factors:

- good health between children and parents;
- good nutrition;
- strong social support;
- good parenting; and
- adequate stimulative interaction with individuals in the community.

It is also apparent that ECD has a lasting effect on the entire life of a child, more than any other childhood period, as the initial experiences of a child, form the foundation for subsequent learning in later life stages, making it the most critical foundation phase of ultimate growth and development (Irwin et al., 2007).
In order to understand the importance of psychosocial health and well-being in ECD, it is crucial to be acquainted with the different settings in which children are reared, as well as the factors associated with these settings. For children to develop to their full potential in life, Governments should acknowledge the significance of psychosocial health and well-being in ECD, as well as the impact of disparities in the environments on the healthy development of children across borders. Inequalities in ECD could translate into negative life opportunities for children, especially children from a vulnerable, or disadvantaged, backgrounds.

2.9. Psychosocial Health and Well-being in ECD

Although children are shaped and socialised by the values and beliefs of society, the influence of parents on children is still the most important catalyst in early learning (Spera, 2005; Emerson, Fear, Fox & Sanders, 2012). The way in which children develop influences their health in adulthood; any social disadvantages experienced in early childhood could limit their opportunities for health throughout their life (Wood, 2009). According to Akinsola (2011), as well as Singh and Sarkar (2012), the relationship between parents and their children serves as a link between development and well-being, as well as good health, which lays the foundation for learning and academic performance. Caring and nurturing relationships are very important for ECD and serve as building blocks for lifelong benefits in learning, behaviour, as well as cognitive, emotional, social, physical and mental health (National Scientific Council on the Developing Child, 2010).

The relationship between the family and the school has also been identified as a key factor that influences the level of well-being in children. Research findings suggest that the neighbourhood in which children live, has an effect on their well-being and educational outcomes (Wrigley, 2006). Parents play an important role in the psychosocial health and well-being of children, not only in the home, but also by forming positive and active relationships with the school community (Betancourt & Khan, 2008). Research findings confirm that education has a positive impact on the socio-emotional well-being of children and their ability to lead a healthy and happy live (United Nations Development Programme [UNDP], 2010; Australian Institute of Health and Welfare [AIHW], 2010). However, the well-being of children in rural areas is threatened by the lack of resources and the failure to develop interventions, due to poor targeting and urban bias (Ngwenya & Nnyepi, 2011).
2.9.1. The role of Parents

The first teacher in the life of a child is the parent (Ajayi, 2006). A child normally starts to learn at home, before entering school (Maduewesi & Agusiobo, 2005). Children learn through observation and role modelling of those, who they are in contact with on a daily basis (Huitt, 2004). Families have the potential to provide the foundations for a healthier and more harmonious society, while primary caregivers are crucial in creating a loving, warm and nurturing environment for children (Säljö, 2000). The continuation of learning starts when children enter pre-schools, kindergarten and primary school levels, which transitions to secondary school and other higher institutions of learning (Broström, 2003). Children, therefore, receive learning inside and outside the familial home, with parents and primary caregivers playing the crucial role of providing children with learning opportunities at home (Akinsola, 2011). The impact of a family can be seen in several relations, such as: mother-infant relations; marital dynamics; parent-teacher relations; intergenerational family issues (such as poverty, HIV/AIDS, violence); and various other relationships. Additionally, a study conducted by Isenberg and Jalongo (2006) suggests that families provide children with their initial and, in many cases, their most powerful learning arrangement. Therefore, a secure attachment to trusted caregivers with consistent learning support and affection in early life is a key requisite for optimal child development.

When a child spends his/her early years in an environment that is emotionally and physically unsupportive and not conducive, this environment will affect brain development in adverse ways, and lead to cognitive, social and behavioural delays. In addition, the foundation for the development of psychosocial competencies, regarding the relationships between children and their parents, non-parental caregivers and peers, is laid in the early years (Mustard, 2010). These interactive relationships set the stage for successful social interactions in later childhood and adulthood; the experiences and opportunities of early childhood determine the outcomes of later years. A child’s psychosocial development, therefore, is crucial to his/her overall well-being (Damon & Eisenberg, 1998; Fabes, Gaertner & Popp, 2006; Halle, 2002; Thompson & Lagattuta, 2006). According to Shonkoff et al. (2009), a balanced approach to psychosocial, cognitive development will best prepare all children for success in school, and later in the workplace and community.
2.9.2. The role of Teachers

The manner in which early childhood professionals meet children’s essential needs, strongly influences their success as learners and future citizens. Apart from the intimate family environment, where children are reared, schools play as integral a part in the early development of children, allowing them to socially interact with peers and form supportive relationships with teachers.

Research indicates that teachers serve as ‘substitute’ parents, and play a crucial role in the emotional development of children, while parent-caregiver attachment relationships play a vital role in the emotional well-being of children in their early years (Duncan, Kalil & Ziol-Guest, 2013). Despite the challenges that children might face, provided that their basic physical and material needs are met while growing up, they will possess a zest for life and are likely to trust themselves and the community that they live in. A study conducted by Hinkley et al. (2014) confirms that the support of psychosocial health and well-being in ECD is crucial for the later development of children, as well as mental health, as good health is the foundation of learning and academic performance in early childhood (Singhet al., 2012).

Additionally, when children have repeated successful coping experiences, they are most likely to develop a sense of confidence and competence in their families and their communities (Hayden, De Gioia & Hadley, 2005). Similarly, children who grow up without having their basic needs met, will be disadvantaged from having a healthy start in life (Gupta & Theus, 2006). It is, therefore, very important that the implications of the conditions affecting ECD be recognised by early childhood professionals.

2.10. Developing contextually appropriate measures to assess Psychosocial Health and Well-being of children in ECD

According to a research study conducted by Sun, Zhu & Ennis (2012), there are, currently, no globally accepted assessment measures for ECD because of the concerns that the development of assessment measures in one country, may not be valid in others, due to the cultural and contextual differences in both content and assessment techniques. Rao et al. (2012) assert that contextually appropriate ECD assessment measures are important for countries to regulate and
monitor early childhood services. These measures, therefore, are crucial to analyse the impact of early childhood policies and programmes on children and would be able to track the development of children over time. The development of assessment measures is important and needs to be relevant to address the specific goals for ECD and education in a country (Rao, 2010). Besides, several countries, globally, have exerted efforts towards the development of contextually appropriate assessment measures for ECD (Miyahara & Meyers, 2008).

Due to the lack of appropriate instruments for assessing and monitoring a child in ECD and learning, the Early Learning and Developmental Standards (ELDS) project was launched by UNICEF, in partnership with the University of Columbia, in 2002 (Rao et al., 2012). In addition, a cultural appropriate standard has been developed in 43 countries, during 2009 (Kagan & Britto, 2005). These authors are of the opinion that the use of standards operationalises expectations for children in the early development phases and, therefore, provides a foundation for measuring learning in young children. They further highlight that the results could be used for the implementation of policies that promote more equitable learning outcomes.

Similarly, aspects of physical, socio-emotional, cognitive and language development have been included in the ELDS, globally (Rao & Pearson, 2007). These aspects may differ, since they reflect the values and expectations of child development, according to specific ages. Due to the lack of current assessment measures for ECD, the purpose of this current study is to design a School Health Index Score Card that assesses psychosocial health and well-being of learners in ECD. This score card relies on the direct assessment of children regarding reports given by the parents/caregivers and teachers in South Africa. The following section, Section Two, discusses the importance of health promotion in a school setting, from an international to a national perspective.

**SECTION TWO**

2.11. Health Promotion

Families, schools and childcare environments have been recognised as effective vehicles for
health promotion and child development (Pagnini, Wilkinfeld, King, Booth & Booth, 2007; Yang & Shin, 2008). The emergence of health promotion, as a cornerstone of contemporary public health, was aimed at advancing the physical, social and mental health of individuals in the broader community (WHO, 1986). Due to the momentum gained on health promotion, the World Health Organisation (WHO) identified that a “healthy public policy establishes the environment” at a second International Conference on Health Promotion (WHO, 1998). The main focus of the healthy public policy was to create an environment that enabled an individual to lead a healthier life.

2.11.1. International Perspectives - European Network of Health Promoting Schools (ENHPS)

The First Conference of the European Network of Health Promoting Schools, “The Health Promoting School – an Investment in Education, Health and Democracy”, Thessaloniki-Halkidiki, was held in Greece, in May 1997 (ENHPS Technical Secretariat, 1998). Policy-makers, parliamentarians, parents, teachers, health professionals, other experts in education, representatives of international bodies and young people from 43 countries attended this conference (Stewart Burgher, Barnekow Rasmussen & Rivett, 1999). Three international agencies, namely the European Commission (EC), the World Health Organisation (WHO) Regional Office for Europe and the Council for Europe (CE), launched an innovative project in 1991 to combine education and health promotion, in order to realise the potential of both (Stewart Burgher et al., 1999). In collaboration of these three leading agencies, as well as a multitude of European countries and schools, the European Network of Health Promoting Schools (ENHPS) was formed that aimed at creating environments that are conducive to the health of students at schools (Clift & Jensen, 2005). The goal of the ENHPS was to make schools a better place, in which students could learn and work, allowing students and staff to take action that would benefit them physically, socially and mentally. This process, therefore, would allow students and staff to gain knowledge and skills that would improve education outcomes (Clift & Jensen, 2005).

According to Stewart Burgher et al. (1999), health education forms part of the education curriculum and has been taught in schools for decades. However, health
education taught in schools usually focused on single causes of ill health of individuals, such as tobacco smoking, alcohol, drug abuse and nutrition (IUHPE, 2011). Due to the link between education and health, the EC, CE and the WHO Regional Office for Europe developed the concept of integrating health promotion into a school setting to address the well-being of students, teachers, all other school staff, parents and the broader community connected to the school (Stewart Burgher et al., 1999; Stewart-Brown, 2006). To enable schools to become a healthier place, The ENHPS, therefore, aimed to integrate health promotion into every aspect of the curriculum, in order to introduce healthy programmes and practices into the daily routines of schools (Clift & Jensen, 2005).

An additional aim of the ENHPS was to focus on improving relationships between the schools and the broader community, as well as improving working conditions within the school setting (Stewart-Brown, 2006). In 1991, the ENHPS piloted schools in four central and eastern European countries, namely, the Czech Republic, Hungary, Poland and Slovakia and has since expanded to over 38 countries across Europe (Stewart Burgher et al., 1999). The implementation of these pilot projects, not only generated a vast body of experience as the foundation for integrating health promotion into all aspects of the curriculum, but aimed to create a vehicle that would influence education policy and practice throughout Europe (Stewart Burgher et al., 1999; Clift & Jensen, 2005).

Health promotion, therefore, became the catalyst to improve the quality of services provided to learners in a school setting (Clift & Jensen, 2005). The work of the ENHPS was also consistent with the current priorities for health promotion, as stipulated by the WHO, which addressed a particular setting, enabling individuals, who were linked to it, to improve their health (Stewart Burgher et al., 1999). Health promoting schools were established throughout Europe, in collaboration of the EC, CE and WHO (European Network of Health Promoting Schools [ENHPS] Technical Secretariat, 1997).

The focus of this ENHPS conference was the integration of health promotion into the education curriculum that had to contribute, through strategies, such as participation,
action, competence and empowerment, to the democratic development in general, and particularly in schools, in order to minimise the unequal distribution of health risks and learning opportunities in this setting (Clift & Jensen, 2005). The following ten key requirements emerged from the resolution of this conference:

- Democracy;
- Equity;
- Empowerment;
- The school environment;
- The curriculum;
- Teacher training;
- The measurement of success;
- Collaboration;
- Communities; and
- Sustainability.

These requirements needed to be met in Europe before each child could benefit from the opportunity of attending a Health Promoting School. According to Clift and Jensen (2005), the ENHPS envisages that the successful implementation of health promoting school policies, principles and methods could contribute significantly to the educational experiences of all young children. Stewart Burgher et al. (1999) assert that schools play a key role in aiding students to gain knowledge and develop the skills to become successful in adult life, however, they often fall short of accomplishing this goal.

Stewart Burgher et al. (1999) further inform that the health promoting school is based on a social model of health that places the young person in the centre of the model, viewed as a whole individual within a dynamic environment. According to Stewart Burgher et al. (1999), this model also emphasises the organisation of the school, while still focusing on the individual. Additionally, according to Stewart-Brown (2006), a health promoting school invests in both health and education on a national, as well as local level, which will have a substantial impact on reducing inequities in society, while
leading to the economic growth of a population at large.

2.11.2. National Perspectives

Health promotion first entered the South African health system before 1994. Currently, Health Promotion serves as a Directorate, located within the Social Sector Cluster (SSC) of Primary Health Care (PHC), District and Development operations, under the Deputy Director General for Health Service Delivery, in the National Department of Health [DoH] (Oyena, 2007). According to Oyena (2007), the first significant part of the new policy for health promotion in South Africa appeared in a health policy document of the African National Congress (ANC). The vision for Primary Health Care (PHC) was recognised by the ANC, as well as the major contribution that health promotion could make to strengthen its (ANC) commitment to improve the health of South Africans. This contribution has led to the extensive focusing of health promotion policy processes, inside and outside the country (South Africa, Department of Education [DoE], 2009; Oyena, 2007). Oyena (2007) adds that health promotion is one of the main pillars of PHC in South Africa, which focuses on social justice and development, and offers a different perspective to achieving ‘Health for All’ (Hayden, De Gioia & Hadley, 2005; Oyena, 2007).

Additionally, a study conducted by the University of the Western Cape (UWC) (2006) shows that the Department of Health have over-arching policies supporting health promotion in an education framework. Policies, such as the Health Promotion Policy, (University of the Western Cape, 2006), School Health Policy, (South Africa, Department of Health, 2003) and the Health and Wellness Policy (South Africa, Department of Health, 2012) indicate that teaching and learning remain the core purpose of schooling, and that the biological, psychological and social barriers to teaching and learning needed to be addressed within a social context. However, although the School Health Policy and Implementation Guidelines were launched and incorporated as a component of the PHC package in 2003, implementation thereof has been slow in many areas, with low coverage at sub-district, school and learner’s levels (SA, DoH & DoBE, 2012).
2.12. Health Promotion Programmes and Policies

A school health promotion programme is defined as “a combination of services ensuring the physical, mental and social well-being of learners, so as to maximise their learning capabilities” (World Health Organisation [WHO], 1996). According to the WHO Expert Committee on School Health, a school health programme/s can advance public health, education, social and economic development; the expansion of a school health programme will globally attest to the value placed on such programmes (WHO, 1996).

The South African Government has pledged to “put children first” (Office of the High Commissioner of Human Rights, 1989) by becoming a signatory to the United Nations Convention on the Rights of the Child. This commitment is in line with the Bill of Rights of the South African Constitution (Act of 108 of 1996), which aims to ensure that children’s rights are upheld, and that provision is made to enable all children to reach their full potential.

In his State of the Nation address in 2010, the President of South Africa committed the government to reinstating health programmes in public schools in South Africa (South Africa. Office of the President, 2010). Progressing towards building a democratic society in South Africa, major policies, such as the Integrated School Health Policy [ISHP] (SA, DoH & DBE, 2010), and programmes, such as the Care Support for Teaching and Learning [CSTL](South Africa, Department of Basic Education [DoBE],2012), the Health Promoting Schools Programme [HPSP] (South Africa, Department of Education [DoE], 2012.), and the Health Promoting Schools Initiative [HPS] (WHO/AFRO, 2007) have been established within regulatory frameworks of education. The primary focus of these programmes is to address the current health needs of learners, their families, teachers, as well as the community. A secondary focus is to implement interventions that support the development of health and well-being for all learners at school. These programmes also focus on strengthening school health services, the key components of primary health care delivery in South Africa.

2.12.1. Integrated School Health Policy (ISHP)

The aim of the Integrated School Health Policy (ISHP) is “to contribute to the improvement of the general health of school-going children, as well as the environmental conditions in schools and address health barriers to learning in order to
As indicated by this policy (pp.6), children spend most of their formative years in a classroom environment. This environment, therefore, provides a suitable opportunity for the implementation of health education and interventions. However, to implement policies and programmes require strong intersectoral collaboration between the Department of Health, Department of Basic Education and the Department of Social Development. These departments are the key role-players that contribute to the development of sustainable and comprehensive school health programmes and, therefore, they are responsible to ensure that the ISHP reaches all learners, in all schools.

In addition, the Children’s Act (Act No. 38 of 2005) and the National Integrated Plan for ECD (South Africa, Departments of Education, Social Development and Health in conjunction with United Nations International Children’s Emergency Fund [UNICEF] (2005). provide a framework for the provision of services to children under the age of 5 years, to address issues of child protection, children’s rights, growth monitoring, immunisation, childhood illnesses, early learning stimulation, infant and young child feeding, psychosocial care and appropriate referral. Since children younger than fifteen years old constitute approximately 30% of the population of South Africa, a major investment in ECD, which serves as a link between families and young children, to health, education and nutrition services, has been called for by the Commission on the Social Determinants of Health (Statistics, South Africa, 2014, p. 7; Commission on Social Determinants of Health, 2008).

2.12.2. Care and Support for Teaching and Learning Programme (CSTL)

The Care and Support for Teaching and Learning (CSTL) Programme, a South African Development Community (SADC) initiative, was adopted by the SADC Education Ministers in 2008 (SADC, 2008). The aim of this programme is to realise the educational rights of all children, especially those from disadvantaged backgrounds. This programme enables schools to become inclusive centres of learning, care and
support, by endeavouring to prevent and alleviate factors that have a negative effect on the enrolment, retention, performance and progression of vulnerable learners in schools. This will be accomplished by addressing barriers to learning and teaching (SA, DoBE & MIET Africa, 2010).

The implementation of Phase 1 of the CSTL programme in South Africa occurred during 2008-2014. The DoBE aims to fulfil two roles with this initiative; firstly, to deliver and expand appropriate care and support services in, and through, schools and, secondly, to create an enabling environment within the education system for other stakeholders, such as the DoHand the DSD, to support teachers and learners. In addition, an overarching framework of consistent care and support initiatives, which addresses barriers to teaching and learning, is currently being implemented in schools, through the CSTL programme. This programme promotes mainstreaming, or a systematic response to the care and support needs of learners, based on a strong policy mandate both within and outside of the education sector, as stipulated in the Integrated School Health Policy (SA, DoH & DoBE, 2010). Nine priority areas have been identified for the implementation of the CSTL programme, namely:

- Nutrition;
- Health Promotion;
- Infrastructure, Water and Sanitation;
- Social Welfare Services;
- Safety and Protection;
- Psychosocial Support;
- Curriculum Support;
- Co-curricular Support; and
- Material Support.

2.12.3. The Health Promoting Schools Programme (HPSP)

The concept of Health Promoting Schools was globally adopted by the WHO in 1995
through its Global School Health Programme [GSHP] (South Africa, Department of Health [DoH], 2000). The HPSP is a WHO/AFRO initiative that is established on the actions called for in both the Ottawa Charter for Health Promotion and the Jakarta Declaration for Promoting Health. The HPSP, therefore, strives to increase, on an international, national and local scale, the development of Health Promoting Schools (HPS), with the aim of improving the health of learners, their family members, teachers, other school staff, as well as the community. The primary goal of the Global School Health Programme (GSHP), therefore, is to increase the number of schools, assessed as being “Health Promoting Schools” (SA, DoH, 2000).

A Health Promoting School is one which:

- Fosters health learning with all the means at its disposal;
- Engages health and education officials, educators, pupils, parents and community leaders in efforts to promote health;
- Strives to provide a healthy environment, school health education, school health services and school/community projects and outreach;
- Strives to improve the health of pupils, school personnel, families, as well as community members, and works with community leaders to help them understand how the community contributes to help, or undermine, health and education;
- Implements policies, practices, and other measures that respect the individual’s self-esteem, provide opportunities for success, acknowledge good efforts and intentions, as well as personal achievements. (SA, DoH, 2000).

St Leger, Young, Blanchard and Perry (2010) suggest that a health promoting school approach is a ‘whole-school’ approach that enhances both health and educational outcomes of children and adolescents, through learning and teaching experiences, initiated in schools. According to Whitman and Aldinger (2009), as well as Stewart-Brown (2006), both education and health outcomes improve, when schools use the health promoting school approach to address health related issues in an educational context. Additionally, negative effects on student learning are mostly influenced by social-emotional factors, such as student-teacher and teacher-teacher interactions,
school culture, classroom climate and peer group relationships (Weare & Markham, 2005; West, Sweeting & Leyland, 2004). Social-emotional factors, therefore, are fundamental to the way a health promoting school operates and achieves its education and health goals (Stewart-Brown, 2006; Bond et al., 2007).

Similarly, Currie and Rossin-Slater (2014) assert that a ‘whole-school’ approach, where there is coherence between the school’s policies and practices, aims to promote social inclusion and commitment to education, facilitates and improves learning outcomes, increases emotional well-being, and reduces the health risk behaviours of children. A health promoting school, therefore, could be characterised as a “school constantly strengthening its capacity as a healthy setting for living and working” (WHO, 1998, p. 2).

2.12.4. The Health Promoting Schools Initiative (HPS)

The Health Promoting Schools Initiative [HPS] (World Health Organisation [WHO], 1996a), is a WHO recommended programme that has been established in South Africa and is supported by a health promotion philosophy (Hung, Chiang, Dawson & Lee, 2014). The HPS has five components, namely:

- Improving access to appropriate services to address the health needs of the school community;
- Developing the personal skills of members of the school community, thereby enabling them to improve their own health, and influence the healthy development of others;
- Developing the school as a supportive environment for the development of healthy attitudes and practices;
- Facilitating community action that encourages the school and broader community to take ownership of and seek ways to address their collective health needs, by accessing resources for health (South Africa, Department of Health [DoH], 1997).
- Upholding the commitment made by the South African Government, which is extremely crucial in ECD, as it is during this phase that special attention to optimal health will improve, not only the survival, growth and health of children, but also their learning outcomes and development. By supporting a
learner’s emotional and social development and competence, the role of schools and Early Childhood Centres is perceived as being equally important to their role of supporting academic development and competence (Holden, 2005).

2.13. Schools and Early Childhood Centers as settings for health promotion

The International Union for Health Promotion and Education (IUHPE, 2011) defines health promotion in a school setting as any activity undertaken to improve and/or protect the health of all school users. According to the IUHPE, health promotion is a broader concept than health education and includes the provision of and activities relating to school health policies, the school’s physical and social environment, the curriculum, community links and health services. Research suggests that, based on the current health promotion experiences and activities in South Africa, the National Department of Health considers the settings approach as crucial in health promotion (Oyena, 2007; Edvardsson et al., 2011). According to Gupta and Theus (2006), schools are considered appropriate settings of health promotion for children and staff, as children spend most of their days in the presence of their peers, teachers and other staff members at school; schools therefore provide an environment for the improvement of children’s health, self-esteem, behaviour and life skills.

A research study conducted by Dooris (2006) on health promotion in ECD revealed that a health promotion approach is based on an ecological understanding of child development and is effective in promoting behaviours that will protect children, from childhood to adulthood. According to Dooris (2006), the development of a child is influenced by the complex layers and patterns of biological, behavioural, family, social, environmental and policy factors. Multiple strategies, therefore, need to address the complex determinants of child development and the necessity of forming partnerships across various sectors, to address these diverse factors (Silverman, Hong & Trepanier-Street, 2010). Schools and Early Childhood Centers, therefore, provide excellent opportunities for health promotion interventions, as a vast amount of children and their families are accessed simultaneously, as well as over an extended period, which is necessary for sustainable changes to transpire (Edvardsson et al., 2011). Schools and Early Childhood Centers are also well positioned to provide communities with leadership, through the provision of supportive environments for health promotion and well-being of children (Hayden, De Gioia & Hadley, 2005; Taveras, LaPelle,
Gupta & Finkelstein, 2006).

However, although Schools and Early Childhood Centers could act as settings for health promotion, the implementation of any form of health promotion in this context is limited (Larson, Ward, Neelon & Story, 2011). Studies reveal that Health Promotion research and evaluation in South Africa is limited and that a health promotion evidence base needs to be developed, made accessible to, and used by practitioners (Oyena, 2007). Since children constitute a large amount of the global population, it, therefore, is important that parents/primary caregivers, family members, teachers, communities, policymakers and governments understand the importance of investing in the psychosocial health and well-being of children in the early phases of life, as well as what the outcomes would be if they did not. This study, therefore, made use the School Well-Being Model that focuses on the impact of the multiple interacting systems of influence and the dynamic interactions between the child, home, schools and communities over time (Konu & Rimpelä, 2002).

### 2.14. School Well-being Model (SWBM)

The School Well-Being was selected for this study because it explains how a variety of interacting, interdependent domains of influence are instrumental in the early phases of the life of a child. This model, developed by Konu and Rimpelä (2002), and grounded on Allardt’s theory of welfare (Allardt, 1976a; 1976b; 1989), takes into account the important impact of the home and the surrounding community of the learner. The purpose of the SWBM is to produce information about well-being in schools (Konu & Rimpelä, 2002), which information could be used in the development of policies and programmes of health promotion for the school and as a locally relevant and up-to-date basis for the school subject “terveystieto” [health knowledge] (Konu, 2005).

Konu and Rimpelä (2002) suggest that the structure of the SWBM may be helpful to detect problematic areas, encountered by children daily or where children are in need of support. This Model could also serve as a guide to assist teachers, educators, and other professionals, to discover different teaching and learning practices that promote the well-being of children in school. Additionally, this model takes into account the impact of the child’s surroundings, as well as how these surroundings could enhance, or hamper, children from developing to their fullest potential. The concept of “welfare” is used by Allardt (Allardt, 1976a; 1976b;
1989) in the sociological tradition. He explains that “welfare” in the Nordic languages means ‘well-being’, which addresses both the level of living and the quality of life (Allardt, 1989). Similarly, researchers across different disciplines have examined different aspects of well-being, including physical well-being, economic well-being, social well-being, development and activity, emotional well-being, psychological well-being, life satisfaction, domain specific satisfaction, engaging activities and work, as there is no consensus around a single definition of well-being (Eid & Diener, 2009; Kahneman, Alan, Krueger, Schkade & Stone, 2004; Eide & Showalter, 2011). However, Ben-Arieh and Frønes (2011) define child well-being as “child well-being encompasses quality of life in a broad sense and refers to a child’s economic conditions, peer relations, political rights, and opportunities for development”.

Figure 2.1. The School Well-Being Model (Konu & Rimpelä, 2002).
Allardt (1989) asserts that well-being has to be determined in a historical way and has to be defined continuously as the living conditions of an individual changes. Allard defines well-being as “a state in which it is possible for a human being to satisfy his/her basic needs”, both materially and non-materially (Allardt, 1989). These needs, as indicated in Figure 2.1, are divided into three categories and a reference is provided for each of these needs:

(i) having (material conditions and personal needs);
(ii) loving (needs to relate to other people and to form social identities); and
(iii) being (integration into society and living in harmony with nature).

Well-being, teaching/education and achievements/learning are interconnected in this model. An important part of education is health education that aims to strengthen the health literacy of the child (Nutbeam, 2000). The SWBM, therefore, considers health education and health promotion as crucial components of schooling. However, the basic education of a child to develop to his/ her full potential is influenced by where the child lives, and the impact of his/her surroundings, therefore, should not be underestimated (Konu & Rimpelä, 2002).

Konu and Rimpelä (2002) conceptualised the ‘child in school well-being’ into four categories:

- School conditions (includes the physical environment inside and outside the school, learning, curriculum, punishments, services to learners);
- Social relationships (social learning environment, student-teacher relationship, peer relationships, group dynamics, bullying, cooperation between school and homes, decision-making in school and the school climate);
- Means for self-fulfilment (each person being respected as a valuable part of a society; learners should be considered an equal important member of the school and society); and
- Health status (absence of disease and illness) is seen as an important part of well-being (Allardt, 1976a, pp. 134-141 & 237).

These categories contain several aspects of, and the importance of, the life of a child at school; it also reveals the impact of the ‘out of school surroundings’ on the development of
the child. Children in their early childhood years are exposed to several social learning experiences that impact on their development (Brink, 2006, p. 29). Studies reveal that the most intimate level of the child’s development starts with the family, which, at a broader level, refers to the residential communities (such as neighborhood’s), the relational communities (such as those based on religious or other social bonds) and the early childhood service environments (Richter, 2004). This study further indicates that each of these environments, in which the child is raised, lives and learns, is situated in a broader socioeconomic context, shaped by factors at the regional, national and international level (Richter, 2004). In addition, actions taken at any of these environmental levels, therefore, will affect the psychosocial health and well-being of the child, not only in the present, but also throughout his/her entire life.

2.15. Conclusion

The child’s psychosocial health and well-being is best supported by parents/primary caregivers, teachers and their relational/residential environment. These individuals could multiply or limit the opportunities of providing the child with a nurturing and stimulating environment that starts at birth into childhood and later adulthood. A compelling body of evidence clearly reveal the importance of investing in the child, in the early phases of his/her life. There is also growing body of evidence asserting that investing in children in early childhood would provide children with optimal growth, development and academic achievement. To invest in ECD would add to the overall economy of any country. Although progress has been made by the South African Government over the past 20 years, there is still a long way to go before it could be said that they ‘are putting young children first’; evidence clearly reveals that the implementation, evaluation and any form of health promotion in South African schools is limited. A need for health promotion that is evidence based must still be developed and made accessible to practitioners. A detailed explanation of the methodology used for this study, is provided in Chapter 3.
CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter presents the methodological aspects of the study and is based on the following aim: To design a School Health Index Score Card to assess psychosocial health and well-being of learners in Early Childhood Development (ECD) at schools. A mixed methods design was used as a methodological framework for this study, which influenced the proceedings of the research. The Psychosocial Theory on Child Development and the School Well-Being model (see Chapter Two) was used to provide an understanding of the importance of psychosocial health and well-being of children in ECD. This study was guided by the following questions:

- What is the status/level of psychosocial health and well-being of learners in ECD at primary schools?
- What were the instruments, and how were they used, in previous research studies to assess the psychosocial health and well-being of learners in ECD at primary schools?
- What are the current health promotion practices in ECD at primary schools?
- Would a School Health Index Score Card be effective in the assessment of psychosocial health and well-being in ECD at primary schools?

3.2. Mixed Method Research Design

Both quantitative and qualitative methods were used to provide a better understanding of the problem, which could not be achieved by using a single method (Creswell & Plano Clark, 2007; Elliot, 2005; Teddlie&Tashakkori, 2003; Tashakkori & Teddlie, 2003; Tashakkori&Teddlie, 2010). Creswell and Plano Clark (2011, p. 60) assert that the importance of the research problem and the research questions is the fundamental principle for mixed methods (MM) research design, and stems from the pragmatist foundation for conducting MM research of “what works”, referring to, what best addresses the research problem and research questions. Therefore, a researcher should first articulate the research problem and
the research questions. Thereafter, a researcher should carefully consider the choice of a suitable design that would possibly solve the research problem and answer the research questions (Creswell et al., 2011, p. 61). MM has been referred to as the “third methodological movement”, after quantitative research and qualitative research (Tashakkori & Teddlie, 2003, p. 5). According to Johnson and Onwuegbuzie (2004, p. 15), it is the “third research paradigm”, and Mayring (2007, p. 1) refers to it as a “new star in the social science sky”.

According to Creswell and Plano Clark (2011, p. 2), MM is recognised as an accessible approach to inquiry. Johnson and Onwuegbuzie (2004, pp. 17-18) define MM research as “the class of research where the researcher mixes, or combines, quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study”. The MM definition of Creswell and Plano Clark (2007, p. 5) provides a methods and philosophical orientation as follows:

Mixed methods research is a research design with philosophical assumptions, as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study, or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems that either approach alone.

Creswell and Plano Clark (2011, p. 5) add that MM relies on the following core characteristics, which adequately describe MM. These characteristics combine methods, a philosophy and a research design orientation that should be incorporated in many diverse viewpoints by the researcher, and are as follows:

- collects and analyses persuasively and rigorously both qualitative and quantitative data (based on the research questions);
- mixes/integrates/links the two forms of data concurrently, by combining/merging them sequentially, by having one build on the other, or embedding one within the other;
- gives priority to one or both forms of data (in terms of what the research emphasises);
- uses these procedures in a single study, or multiple phases of a programme of study;
- frames these procedures within philosophical worldviews and theoretical lenses; and
- combines the procedures into specific research designs that direct the plan for conducting the study.

The researcher, therefore, is in a position to decide which MM design will be suitable for use in a study. In addition, the decision is based on the different ways, in which the quantitative and qualitative components used in a particular study, relate to each other. Although the core characteristics of MM are important in conducting research, philosophical assumptions in MM research consist of a basic set of beliefs, or assumptions, that guide the inquiries (Cuba & Lincoln, 2005). Creswell and Plano Clark (2011, p. 39) describe these assumptions as a ‘worldview’, meaning that the researcher generates a ‘worldview’, comprising his/her beliefs and assumptions, which informs the study to be conducted. Similarly, according to Kuhn (1970), synonymous to worldviews, are ‘paradigms’, which are sets of generalisations, beliefs and the values brought by the researcher to the study.

3.2.1. The Pragmatic Approach

There are different worldviews, such as post-positivism, constructivism, participatory and pragmatism. Pragmatism is typically associated with MM, as it focuses on the consequences of research and the importance of the research question, rather than the research methods. According to Creswell and Plano Clark (2007), this worldview also focuses on the multiple data collection methods that inform the problem under study, is pluralistic and geared to “what works” and practice. Creswell and Plano Clark (2007) emphasise that, although all four worldviews have common elements, such as personal experiences, history and culture, they assume different stances regarding them. These elements are very important because inquiries in research are guided by how people perceive the world, which, in turn, creates their belief system. Creswell (2009), as well as Cuba and Lincoln (2005, pp. 191-215) assert that worldviews differ in nature from ontology (reality), epistemology (how to gain knowledge of what is known), axiology (the role that values play in research), methodology (the process of research) and rhetoric (the language of research). In addition, reality is viewed as singular, as well as multiple by a pragmatist, because a theory selected for a study might be useful to
explain the phenomenon of the study and, therefore, it is important to assess the various input by individuals into the nature of the phenomenon.

However, prior to designing and conducting a MM research, researchers need to know the alternative stances of the different worldviews of MM research and possess the ability to articulate the stance that will best relate to their studies (Creswell & Plano Clark, 2011). In this current study, therefore, a pragmatic approach is employed, which is based on the evidence provided by Morgan (2007, p. 71), who highlights that pragmatism offers a reciprocal approach between quantitative and qualitative paradigms. The reciprocal approach allows that knowledge, from different participants, concerning psychosocial health and well-being of learners, be gathered through the separate processes used in this study to answer the research questions. Morgan (2007, pp. 67-70) refers to the objective and subjective knowledge as “shared meanings” and “joint action”, which means that the central focus of a pragmatic approach is “not the abstract pursuit of knowledge through inquiry, but rather the attempt to gain knowledge in the pursuit of desired ends”. In this study, two approaches were employed when collecting data: (1) an objective approach, by observing the completion of the questionnaires, and (2) a subjective approach, by interviewing the participants providing their understanding and meanings.

According to Creswell and Plano Clark (2011), a worldview is not always “linked” to the procedures in research, as the guiding assumptions of a worldview often shape the way in which MM researchers construct their procedures. For example, for this study, the quantitative data, obtained through self-administered questionnaires, provide the comprehension of psychosocial health and well-being. The qualitative data, gathered from semi-structured interviews, provide information on the interpretation and comprehension of psychosocial health and well-being. It is evident, therefore, that the pragmatist moves back and forth between the quantitative and qualitative approaches, to ensure that the best possible answer is found, while conducting the study.

3.2.2. Different Mixed Method Designs

Mixed Methods research can be conducted in many different ways, which results in the
use of different MM designs. These designs refer to the different procedures of data collection, data analysing, as well as the interpretation and reporting of data in a research study. According to Creswell and Plano Clark (2007), there are six basic designs for conducting MM research. These are three sequential designs, namely, explanatory, exploratory and transformative, and three concurrent designs, namely, triangulation, nested and transformative. A particular Mixed Methods Design is selected based on the purpose and rationale for choosing it (Hanson, Creswell, Plano Clark, Petska& Creswell, 2005).

3.2.2.1. Sequential Designs

In the sequential explanatory design, the quantitative strand of data collection and analysis has priority over the qualitative strand, as it is implemented first. The qualitative data are used to enhance the quantitative data, with little emphasis placed on the qualitative strand. Teddlie and Tashakorri (2009) define a strand as a component of a study that encompasses the basic process of conducting quantitative or qualitative research – posing a question, collecting data, analysing data, and interpreting results based on that data. The integration occurs at the interpretation and discussion phase. The sequential explanatory design, therefore, is most useful to assess trends and “relationships and/or study findings when they are unexpected” (Creswell et al., 2011; Hanson et al., 2005, p. 229).

In the sequential exploratory design, the qualitative strand of data collection and analysis are implemented first, with the quantitative strand second. In this process, the quantitative data are used to enhance the qualitative data, with little emphasis on the quantitative strand, resulting in the strands having unequal priority in the study. The integration also occurs at the interpretation of data and discussion phase. The sequential exploratory design explores relationships, when, (a) measures or instruments are not available, (b) the variables are unknown, (c) there is no guiding framework or theory, because the design starts qualitatively and is best suited for exploring a phenomenon (Creswell, Plano Clark, Gutmann & Hanson, 2003; Creswell et al., 2011). The primary purpose of this design is to generalise findings that are based on “a few individuals from the first phase to a larger sample gathered during the second phase” (Creswell et al., 2011, p. 86).
The sequential transformative design is a mixed methods design, which allows data collection for quantitative and qualitative strands of the study by proceeding concurrently, sequentially or both (Creswell et al., 2011). According to Roman (2008, p. 112), the transformative design is sequential and unequal in priority, with one component followed by another, and is dependent on the priority provided by the researcher, based on the needs and preferences of the researcher and the study. Creswell et al. (2011) assert that this design could include the decisions of data collection already raised for the concurrent or sequential designs. According to Hanson et al. (2005, p. 229), the sequential transformative design is “useful for giving voice to diverse or alternative perspectives, advocating for research participants and better understanding a phenomenon that may be changing as a result of being studied”.

3.2.2.2. Concurrent Designs

In concurrent mixed methods designs, the researcher collects both quantitative and qualitative data simultaneously and integrates the information in the overall results (Creswell & Plano Clark, 2007). According to Hanson et al. (2005, p. 229), these types of designs are employed to discuss the extent to which the data converges and are useful for “attempting to confirm, cross-validate and corroborate study findings”. An advocacy lens, such as feminist, racial, ethnic, disability, or sexual orientation, does not apply for triangulation and nested designs; however, it is applicable for the transformative design (Mertens, 2003).

In the concurrent triangulation design, two or more methods could be used to confirm, cross-validate, or validate findings within a study. Data collection, therefore, is concurrent, implying that both quantitative and qualitative data are collected and analysed simultaneously with the researcher assigning equal priority to both components (Hanson et al., 2005).

However, the concurrent nested, or embedded, design assigns unequal priority to the application of the quantitative and qualitative components. A nested approach gives priority to one of the methods, which guides the study, while the other is embedded, or nested. The component that is embedded, or nested, usually has less
priority, and is utilised mainly to “answer different questions or a different set of questions” (Hanson et al., 2005, p. 229).

In the concurrent transformative design, the application of an advocacy lens is evident in the problem statement, research questions and the implications of action and change. According to Creswell and Plano Clark (2007), the use of a theoretical perspective, reflected in the purpose, or research questions, of the study, guides all methodological choices. For this design, data are collected simultaneously with priority being unequal in some cases, while in other cases, priority may be equal. In addition, when data are transformed, integration will occur at the data analysis stage. Similarly, data analysis will be separate, and integration could occur at the interpretation stage. According to Hanson et al. (2005, p. 229), as with sequential transformative designs, the concurrent transformative designs are useful for “giving voice to diverse or alternative perspectives, advocating for research participants and better understanding a phenomenon that may be changing as a result of being studied”.

Therefore, in order to choose an appropriate MM design for a study, the rationale for the researcher’s decision should be based on the following four points by Creswell and Plano Clark (2011, p. 64).

- The level of interaction between the strands

The level of interaction is the extent to which the quantitative and qualitative components are kept independent, or the intensity of the interaction between them (Creswell & Plano Clark, 2011, p. 64). For example, quantitative and qualitative data could be collected on the same day, but the researcher decides on which strand to use first. This means that although both interactions take place on the same day, the researcher will keep the quantitative and qualitative research data gathered, independently.

However, once the data collection for the study is completed, the researcher will combine/mix the components together in order to draw a conclusion from the overall interpretation. Interaction between the two strands, therefore, will occur
at any point before the final interpretation of the study. For example, a qualitative strand may follow on the quantitative component, or vice versa, depending on the results. The data of the two components could be analysed together, although different data sets are being utilised.

- **The relative priority of the strands**
  
  Creswell and Plano Clark (2011, p. 65) highlight that priority refers to the “relative importance of weighting of the quantitative and qualitative methods for answering the study’s question”. This means that the researcher could either decide to place emphasis on the quantitative component (using a statistical testing instrument to measure the variables), or the qualitative component (follow-on to instrument construction), depending on the research question of the study.

- **The timing of the strands**
  
  The process of timing refers to the relationship between the quantitative and qualitative components, time of data collection and the order in which the researcher uses the results from the two sets of data, relative to the study (Creswell, 2003; Creswell & Plano Clark, 2007; Johnson & Onwuegbuzie, 2004; Morgan, 2007; Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2006; Green & Caracelli, 2003). The timing occurs within the context of the two components and not only the collection of data. Timing, therefore, can be classified in three ways in a MM design:

  1. sequential timing (implementation of the two components in two distinct phases during data collection and data analysis, with the one type of data collection following on the other, or vice versa)
  2. concurrent timing (occurs when the researcher implements both quantitative and qualitative components during a single phase of the study), and
  3. multi-phase combination timing (implementation of more than one phase that includes sequential and/or concurrent timing over a programme of study (Creswell, 2003; Creswell & Plano Clark, 2007; Johnson
The procedures for mixing strands and Sequential Explanatory Design

Creswell and Plano Clark (2007) are of the opinion that mixing is the process by which a researcher implements the independent or interactive relationship of mixed method study. A mixed method sequential explanatory design is a study that employs both quantitative and qualitative approaches in one study. The data collected from the one approach (quantitative) provides a basis for the next approach (qualitative) used in the study (Creswell & Plano Clark, 2011; Hanson et al., 2005). For this study, the sequential explanatory mixed method design was selected as appropriate. The study, therefore, starts with a quantitative component, followed by a qualitative component. Figure 3.1 provides a diagrammatical representation of the sequential steps taken within the research study.

Figure 3.1. An example of quantitative and qualitative strands in a MM study

3.2.3. Strengths and Weaknesses of using a Mixed Methods Approach

Using a mixed methods design is not the answer for every researcher, or every research problem; it has strengths and weaknesses, as does any other design, and the value of conducting a study that is entirely quantitative or qualitative does not diminish. However, using MM requires certain skills, time and resources for extensive data collection and analysis (Creswell & Plano Clark, 2011, p. 13).
The strengths for the use of the mixed methods design are identified by Creswell and Plano Clark (2011, p. 12) as the following:

- MM encourages the use of multiple worldviews, or paradigms (beliefs and values), rather than the typical association of certain paradigms with quantitative research and others for qualitative research;
- MM is ‘practical’ to solve problems using both numbers and words, combines inductive and deductive thinking, employs skills in observing people, records behaviour and allows the researcher the freedom to use all methods possible, to address a research problem;
- MM research helps answer questions that cannot be answered by quantitative or qualitative approaches independently; and
- MM research provides more evidence for the studying of a research problem than either quantitative or qualitative research independently.

The weaknesses of the mixed methods design, as identified by Morgan (2007), as well as Johnson and Onwuegbuzie (2004) are as follows:

- MM research can be difficult for a single researcher to conduct, due to the amount of work, especially in concurrent study designs;
- MM research is time consuming and costly;
- The researcher must be familiar with both quantitative and qualitative as a multiple method approach, and must have an understanding of the mixing of data; and
- MM research is relatively new, in terms of methodologies available to a researcher, including the analysis of quantitative and qualitative data, paradigm mixing and the interpretation of conflicting results.

### 3.3. The current study framework

This study adopted a participatory action research (PAR) framework within the implementation of the mixed methodological framework to guide the data collection process.
Khanlou and Peter (1999) define participatory action research as a type of research that combines two different approaches: participatory research (PR) and action research (AR). Participatory research encourages equal participation from the researcher, as well as the participants in the research process (Watters, Comeau & Restall, 2010), whereas action research uses findings that reveal strategies to address issues in a community. The need of the community, therefore, is evaluated and action is taken, with the purpose of social change through the development of services and organisations (Lucock, Barber, Jones & Lovell, 2007). Watters et al. (2010) suggest that the concepts of PR and AR are combined, in order to create PAR, which is a research method that involves both participants and researcher throughout the research process, starting from the initial stage, to the gathering of data and the communication of the final results.

The PAR method, therefore, is unique, as the participants are regarded as the experts, because of their real lived experiences relative to the research topic, which ensures that the relevant issues under investigation are being studied (Jacobson, Altenberg, Barnes, Cusson, Rowley & McKinnon, 2005). This method is also a unique approach to research, as power is shared equally among the team members, which eliminates the inequality that traditionally exists between the participants and researcher, in a typical research design (Watters et al., 2010).

According to Watters et al. (2010), the advantages and disadvantages of PAR are as follows:

### 3.3.1. Advantages of Participatory Action Research (PAR)

Participatory action research encourages equal participation from the researcher and the participants in the research process (Watters et al., 2010). The research process and the results, therefore, are more relevant to a specific community, when there is equality between the participants and the researcher (Lucock et al., 2007). Using PAR allows all team members to participate in making collaborative decisions, while every member has a unique and equal chance to make important contributions that will create mutual learning (Watters et al., 2010). Mutual respect among team members, regarding their unique areas of expertise, is another characteristic of the PAR technique. Dickson (1997) asserts that PAR is potentially more appropriate, and a useful methodology for research in health promotion.

### 3.3.2. Disadvantages of Participatory Action Research (PAR)

Young (2006) asserts that PAR requires time, knowledge of the community, and
sensitivity to the participants’ agendas, on the part of the researcher. Gillis and Jackson (2002) caution that PAR could be challenging when the research team includes community members, who may struggle to maintain long-term commitment to the research project. Cook (2012) claims that PAR is time consuming when large numbers of people are required to conduct the research.

Firstly, gathering large numbers of people together for a general assembly in participatory action research is challenging, as their perceptions might be that their views are seldom sought and their voices not always heard (Bergold & Thomas, 2012). Secondly, when one research team backs out, while the research is in progress, a new team has to be formed, and the process needs to start all over again (Young, 2006). This process, therefore, can be extremely time-consuming for a researcher, who has to train a ‘new team’ in order to complete the research. Additionally, the new team might be uninformed about the research project, or lack knowledge of the area under study (Fals-Borda, 2001). Thirdly, due to too much trust and confidence placed in the research team by the research participants of the study, the abuse of discretion may be attempted by the former. Gillis and Jackson (2002) suggest that every member of the research team “must be sensitive and responsive to the different forms of leadership required at different times in the research study”. For example, when the data analyses are done by the researcher, members of the community may be required to supervise the implementation of strategies that will improve the identified social issue.

Finally, the limited experience, knowledge, abilities, as well as skill in participation, results in limited benefits from the system. For example, a researcher, conducting PAR for the first time in a rural community, should be aware that time, relationship building and knowledge concerning the community is required before PAR can be fully implemented (MacDonald, 2012).

3.4. Research Setting

The research study was conducted in Grabouw, a town situated within the Theewaterskloof Municipality (TWK), in the Overberg region, about 80km from Cape Town. Grabouw is the TWK municipality’s largest economic centre. The leading employer in this region is the
Agricultural sector, which contributes approximately 36.5% to the revenue of the local economy. The area is world-renowned for its fruit farming, especially apples. Grabouw farmers have recently initiated a change to wine production, as there are no industries providing employment on a large scale (Statistics South Africa, 2004). The TWK municipality is the largest local authority in the Overberg region with a population of between 90,000 to 110,000 people (Statistics South Africa, 2007).

According to the Local Economic Development Strategy [LED] (Theewaterskloof Local Municipality, 2009), this region has a high unemployment rate, estimated at 38%, with 10% of households with no means of income at all. The TWK 2011/2012 draft operational plan (Theewaterskloof Local Municipality Annual Report, 2011/2012) shows that children aged 0-14 constitute approximately 26.1% of the total population. This report further indicates that 3818 households exist in the urban areas, followed by 1289 households living in rural settlements (farms), and 854 households in rural dense areas. The total population of the town of Grabouw alone is estimated at 40,000, comprising mostly of individuals from a high socio-economic background [mostly Caucasian/White ethnicity], followed by average income earners [mostly of Mixed ethnicity], and lower income earners [mostly of Black African ethnicity] (Statistics South Africa, 2004). Theewaterskloof was chosen as the setting for this study as it formed part of a larger Community Engagement study, funded by the National Research Foundation to build and strengthen the communities in the TWK municipality.

3.5. Research Design of the current study

According to Mouton (2001, p. 55), as well as Fouché and De Vos (1998, p. 123), a research design is a “plan or blueprint of how one intends to conduct research”. In addition, Denzin and Lincoln (2005, p. 22) define a research design as “a flexible set of guidelines that connect theoretical paradigms, first, to strategies of inquiry, and second, to the methods of collecting empirical material”. The research design employed for this current study is the sequential explanatory mixed method design with two distinct phases. Phase one is the identification of the problem in two stages, a baseline assessment and a systematic review. Phase two is the action planning of the School Health Index Score Card, also in two stages, the designing of the scorecard, within a participatory framework, and the engaging of a number of experts in a Delphi study method to examine the effectiveness of the developed School Health Index.
Score Card. As part of the sequential design, phase two used the information of phase one to design the scorecard.

3.6. Population and Sampling

De Vos, Strydom, Fouché & Delport (2005, p.194) defines a population as “the totality of persons, events, organisation units, case records or other sampling units with which the research problem is concerned”. According to Bless and Higson-Smith (1995, p. 85) “the entire set of objects, or group of people, which is the object of research, and about which the researcher wants to determine some characteristics, is called the population, or the universe”. Neuman (2000, p. 521) refers to a universe “as the broad class of units that are covered in a hypothesis”.

In this current study, different study populations were utilised for its various phases/stages. The study population for Phase 1, stage 1 (baseline assessment), consisted of principals, teachers and parents/primary caregivers of children from Reception Year (Grade R) to Grade 3, registered in primary schools within the TWK municipality region. Phase 1, stage 2 (systematic review) of the study made use of databases, search engines and several journals. In Phase 2, stage 1 (workshop), the study population was teachers in the ECD, and for Phase 2, stage 2 (Delphi study) principals, teachers, health promotion officers, school nurses, social workers, psychologists, school governing body members and experts in ECD were involved as the study population.

For the purposes of the study’s data collection process, the researcher is required to select a sample from the total population to participate in a research project. Sampling refers to the process of selecting a sample, as a small portion, or subset, from a defined population, with the intention of it representing the particular population (Black, 2002, p. 48; Gall, Gall & Borg, 2007, p. 166; Hoy, 2010, p. 51; Monette, Sullivan & De Jong, 2011, p.13; Neuman, 2011, p. 241). According to Brink (2001, p. 133), a sample is a group of elements, or units, selected from a defined population. Scott and Morrison (2007, p. 219) refers to sampling as “the selection of a subset of persons, or things, from a larger population, also known as a sampling frame”. According to Onwuegbuzie and Collins (2007, pp. 281-316) determining the sampling scheme, as well as the sample size are important steps in any scientific enquiry,
and with a mixed method approach, the decision for choosing a sampling design depends upon the research question.

Babbie (2011, p. 178) suggests two types of sampling methods:

- Probability sampling refers to samples selected in accordance with probability theory, involving some random-selected mechanism.
- Non-probability sampling includes techniques in which samples are selected in a way not suggested by probability theory.

Bless & Higson-Smith (1995, p. 88), concur that sampling theory distinguishes between two types of sampling methods, namely probability sampling and non-probability sampling. They assert that probability sampling occurs when the probability of including each element of the population (for example, people, groups, homes, or schools) can be determined, implying that every eligible person has an equal chance of being selected for the study. Non-probability sampling refers to the instance where the probability of including each element of the population in a sample is unknown. A non-probability sampling method, therefore, does not specify the probability of each sampling unit being included in the sample (Bless, Higson-Smith & Kagee, 2006, p. 100).

For the purpose of this study, the non-probability sampling method was selected. Babbie, Mouton, Vorster and Prozesky (2006, p. 166) presents four types of non-probability sampling, namely reliance on available subjects sampling, purposive (or judgemental) sampling, snowball sampling and quota sampling.

- Reliance on available subjects sampling
  According to Babbie (2015, p. 186) relying on available subjects such as “stopping people at a street corner or some other location is sometimes called “convenience” or “haphazard” sampling”. Fink (1995); Frey, Carl& Gary(2000); Henry (1990); and MacNealy (1999) assert that convenience sampling includes participants, who are readily available, and who agree to participate in a study. Babbie continues to explain that this method “does not permit any control over the representativeness of a sample, it can only be justified if the researcher wants to study the characteristics of people passing the same sampling point at specified times, or if less-risky sampling methods
are not feasible”.

- **Purposive (or judgemental) sampling**
  According to Neuman (2011, p. 267) purposive sampling is based on “the judgement of an expert in selecting cases, or it selects cases with a specific purpose in mind”. Purposive (or judgemental) sampling methods require the researcher to use his/her own judgement to identify those respondents/participants, who would be useful for the study. This judgement should be informed by the researcher’s knowledge of the study population, its elements and the nature of the research aims. The researcher, therefore, believes that some subjects are more suitable for the research than others are. Those identified, therefore, are purposively chosen as respondents/participants.

- **Snowball sampling**
  Snowball sampling is usually conducted when there is a very small population size. In this type of sampling, the researcher asks the initial subject to identify another potential subject, who also meets the criteria of the research. The downside of using a snowball sample is that it is hardly representative of the population.

- **Quota sampling**
  The quota sampling requires the researcher to identify certain elements in a particular study population. The researcher, therefore, has to describe the characteristics of the study population, and, subsequently, ensures equal, or proportionate, representation of the subjects, depending on which trait is considered the basis for the quota.

In this current study, the purposive sampling technique was employed in all the phases/stages. Firstly, three schools were purposively selected for this study, as they had the highest total of Grade R to Grade 3 learners and were located in the rural areas of Grabouw. Subsequently, the respondents for the quantitative assessment and the participants for the qualitative assessment (both employed in Phase 1, stage 1 – Baseline Assessment) were also purposively selected. A similar technique was applied in Phase 1, stage 2 with the databases, search engines and journals for the Systematic Review. In Phase 2, stage 1 (Drawing up of the School Health Index Score Card), the participants for the focus group discussion, as well as the respondents for the Delphi study (Phase 2, stage 2) were also purposively selected. This technique is useful in preliminary studies, where the researcher seeks to test the
feasibility of a proposed study (Lewis & Sheppard, 2006). Purposive sampling is referred to by Neuman (2000, p. 517) as “a type of non-random sampling in which the researcher uses a wide range of methods to locate all possible cases of highly specific and difficult-to-reach population”. According to Bernard (2002), as well as Lewis and Sheppard (2006), choosing purposive sampling is fundamental to the quality of data gathered, as the reliability and competence of the participant is ensured. It was, therefore, very important to establish a sample that represents the population and was useful to the overall purpose of the study, in general.

In addition, according to Stoker (1985, cited in Strydom & Venter, 2002, pp. 200-201), “the size of a sample needs to be 450 of a population of 10,000 (4.5%) to be representative”. Bless and Higson-Smith (2000, p. 93) add, “…the larger the population, the smaller the percentage of that population the sample needs to be. If the population itself is relatively small, the sample should comprise a reasonably large percentage of the population. Larger samples enable researchers to draw more accurate predictions than in smaller samples, although this is more costly”. Therefore, a larger sample should make the study more representative and should provide a more comprehensive and holistic picture of the research population.

According to Silverman (2000, p. 104), in purposive sampling, a particular unit is chosen because it illustrates some feature, or process, that is of interest for a particular study. Bless et al. (2006, p. 106) asserts that the purposive sampling technique can be invaluable, especially when used by experts, who are familiar with the population under study, as was the case in this study.

3.7. Ethical considerations

Permission to conduct this study was sought from the Senate Higher Degrees Committee at the University of the Western Cape. Ethical clearance to conduct this study was granted by the Senate Research Committee at the University of the Western Cape (Project number 13/2/3, Appendix 1). Once ethical clearance was received, the Western Cape Education Department (WCED) was contacted for permission to conduct the research study. After permission was granted by the WCED (Appendix 2), the respective principals and school governing bodies of the three selected schools were approached to set up appointments, at mutually convenient times, for the researcher to inform them of, and discuss, the research
study. The researcher provided information sheets that outlined the purpose, nature and objectives of the study (Appendix 3). Consent for voluntarily participation was obtained from the principals, as well as members of the governing bodies (Appendices 4 & 5).

The principals of the three primary schools, subsequently, introduced the study to the teachers and the parents/primary caregivers of the learners by way of introductory meetings that were held at the school. The information sheets (Appendix 3) and Consent forms (Appendix 6 & 7) were made available for the parents/primary caregivers of the learners, as well as the teachers, who were targeted as recruits for inclusion in this study.

The prospective respondents were informed that participation in the study was voluntarily and that they were allowed to withdraw from the study at any given time, without any adverse consequences. It was vital for the study that the respondents were aware and completely understood the purpose, nature and objectives of the study. Confidentiality and anonymity issues were explained and assured. The respondents were also informed of their right to omit the demographic section of the questionnaire, if they felt that it was too intrusive, although the importance of the information was emphasised. The researcher also advised that the results of the study would be made available to all the respondents.

3.7.1. Informed consent

In any research study, the respondents/participants have the right to know what the research entails, and what is required of them, in terms of their participation. They need to be informed about the risks and benefits of their participation, and that they are free to terminate their participation in the study, should they choose to do so, without obligations, or adverse consequences. They also need to know how the study might affect them. The researcher ensured that the aforementioned information was provided in the form of verbal clarification, as well as an Information letter (Appendix 3). Confidentiality of information and the reporting of results were explained and those, who willingly consented to participate in the study, were provided with copies of Consent forms (Appendices 4, 5, 6 & 7) for them to complete and sign. Written, informed consent, therefore, was obtained from each respondent/participant.
3.7.2. Confidentiality

The researcher ensured that the information collected in this study was kept strictly confidential by storing all audio tapes and completed questionnaires in a locked filing cabinet, to which only the researcher had access. The researcher undertook to make the results of the study available to the relevant stakeholders on conclusion of the research.

3.7.3. Anonymity

Anonymity is linked confidentiality. The anonymity of the respondents during the quantitative assessment was protected by assigning codes to the completed questionnaires. During the qualitative assessment, fictitious names were assigned to the participants, in order to keep their responses confidential and anonymous. The researcher also advised that anonymity would be maintained, should any publication ensue from this research project.

3.7.4. Risk of potential harm to the subjects

The respondents/participants in this study were encouraged to access the on-going counselling support that was at their disposal, should the psychological, emotional and physical need arise. This could be done by arranging appropriate referrals to counselling, or medical centres.

The researcher undertook to provide the stakeholders and respondents/participants with feedback on the results of the study; the Western Cape Education Department would receive a copy of the thesis and the principals of the participating schools would each receive a condensed report with the main findings of the study. The principals of the schools would subsequently inform the parents/primary caregivers, the teachers and other staff, who had participated in this study, of the findings via parent meetings and staff meetings, as they deemed necessary.

3.8. Implementation of the current study

In this section the implementation of the various phases/stages of the current study are discussed.
3.8.1. Phase 1: Identifying the problem

Betancout and Khan (2008) assert that parents/primary caregivers play an important role in the psychosocial health and well-being of children in their early phases, as does forming a positive and active relationship with the social community. In this current study, research was conducted with the parents/primary caregivers and teachers of learners registered at primary schools in the TWK, Cape Town, regarding their perceptions and knowledge of the basic psychological needs of children in ECD.

3.8.1.1. Stage 1: Baseline Assessment

**Objective 1:** Explore the current guidelines used to assess the psychosocial health and well-being of learners in ECD at primary schools.

In this current study, the baseline assessment employed both quantitative and qualitative methods of data collection, in a sequential explanatory mixed method design.

- **Sampling**
  
  a) **Quantitative**

  The researcher sent out 912 invitations to the parents/primary caregivers of the learners, as well as to the principals and teacher of the three selected primary schools. Voluntary consent to participate in the study, on behalf of their minor children, was received from 521 parents/primary caregivers. Although all the principals and teachers were invited to participate, only one principal and 16 teachers consented. The final sample, therefore, for the quantitative assessment of this study was 521 parents/primary caregivers of learners, 16 teachers and 1 principal from various economic and ethnic backgrounds.

  b) **Qualitative**

  The researcher approached the teachers, who had participated in the quantitative assessment, as possible recruits for the qualitative assessment. A sample of eight teachers/respondents voluntarily
consented to participate in the qualitative assessment. The aim of the exercise was to assess the knowledge that teachers possess regarding the psychosocial/socio-emotional health and well-being of learners in ECD. The focus in qualitative research, therefore, is on the quality of information obtained from the participants, rather than on the size of the sample (Burn & Grove, 2003, p. 257).

- **Data Collection Tools**

  The baseline assessment for this study was conducted by means of a survey. According to Brink (2001, p. 109), “survey studies are concerned with gathering information from a sample of the population. The emphasis in the collection of data in survey studies is on structured indirect observation, questionnaires and interviews”. Data was collected by means of questionnaires in the quantitative context and semi-structured interviews for the qualitative context of this study. The aim of the data collection process was to gather information from the research subjects of the study.

  a) **Quantitative**

     The researcher explored scientific literature to identify instruments that would be suitable to assist in the overall aim, research questions and objectives of the study. The search for instruments that assess psychosocial health and well-being of learners in ECD concluded with the following instruments:

     (i) **Paediatric Quality of Life Inventory [PedsQL] (Varni, Seid & Kurtin, 2001):** As delineated by the WHO, the PedsQL is a 23-item generic score scale designed to measure the core dimensions of health (such as acute and chronic health conditions), as well as the role, or functioning, of the school. The PedsQL consists of four scales (physical, emotional, social and school functioning scales). The respondents were requested to answer the questions on a five point Likert scale, ranging from “never”
to “almost always”.

(ii) **Strengths and Difficulties Questionnaire [SDQ]**

*(Goodman, 2001)*: The SDQ is a brief behavioural screening questionnaire that is suitable for children and adolescents, aged 3-16 years. According to Goodman (2001), the SDQ has been validated extensively as a measure of pro-social behaviour psychopathology internationally, having a strong conceptual basis regarding the social and emotional well-being of children and adolescents. The SDQ consists of 5 scales (emotional, peer problems, conduct problem, pro-social and hyperactivity scale) and can be answered on a 3-point Likert scale that ranges from “not true” to “somewhat true”.

The above-mentioned instruments were included in the drafting the questionnaire that was utilized for the quantitative data collection process. The questionnaire consisted of three sections: (i) Demographical details, (ii) Paediatric Quality of Life Inventory - Adapted Version for the South African context and the (iii) Strengths and Difficulties Questionnaire- Adapted Version for the South African context. The questionnaires were theoretically located in the School Well-Being model (Konu & Rimpelä, 2002, discussed in Chapter Two), but more specifically in the Theory of Psychosocial Development (Erikson, 1950, discussed in Chapter Two), as the purpose of the study was to design a school health index score card to assess psychosocial health and well-being of learners in ECD at primary schools.

*b) Qualitative*

Creswell (2003, pp. 185-188) suggests that “in a qualitative research study, data collection includes setting the boundaries for the study, identifying the purposefully selected individuals for the proposed study, collecting data through unstructured or semi-
structured interviews and observations, and establishing a protocol for recording information”. For this current study, a primary data collection tool, the semi-structured interview, was used to collect the data. In addition, interactive data collection tools were also employed, which are the human interactive and social-communication aspect of research (Visagie, 2010). Semi-structured interviews, therefore, were conducted with the selected participants.

Harrell and Bradley (2009, p. 27) state, “In semi-structured interviewing, a guide is used, with questions and topics that must be covered. The interviewer has some discretion about the order in which questions are asked, but the questions are standardized, and probes may be provided to ensure that the researcher covers the correct material. This kind of interview collects detailed information in a style that is somewhat conversational. Semi-structured interviews are often used when the researcher wants to delve deeply into a topic and to understand thoroughly the answers provided”. The aim of this qualitative data collection process, therefore, was to describe and explore the opinions, perceptions, attitudes and knowledge of the participants regarding the psychosocial health and well-being of learners in ECD. Taylor and Bogdan (1984, p. 2) assert that, in qualitative research, the researcher attempts to understand the reasoning and philosophies behind the words of the participants. According to Borg and Gall (1989, p. 24), data are collected during the interaction of the researcher and the participants.

Kvale (1996, p. 14) posit, “…the qualitative research interview is a construction site for knowledge. An interview is literally an interview, an inter-change of views between two persons conversing about a theme of mutual interest”. According to Mack, Woodsong, Macqueen, Guest and Namey (2005), qualitative interviews are
effective research instruments to explore profound insights into how people experience, feel and interpret the social world.

Three different forms of interviews (structured, semi-structured and unstructured interviews) have been identified in research methods literature (May, 1997; Saunders, Lewis & Thornhill, 2003). Dawson (2002) suggests that the semi-structured interview is possibly the most widespread type used in qualitative research. According to Dawson (2002), with this kind of interview, the researcher pre-establishes a set of questions to acquire more information about specific issues and sometimes identify new issues that were not originally part of the interview. Darmer (1995, pp. 252-272) asserts that the semi-structured interview is neither a free conversation, nor a highly structured questionnaire. Semi-structure interviews allow the researcher to regulate the order of the questions, while the participants have the liberty to expand their ideas and converse in detail about diverse subjects, instead of relying solely on concepts and questions defined before the interview.

- **Pilot Study**

Prior to the main study fieldwork, a pilot test study was conducted to assess the feasibility and test the reliability of the quantitative data collection instrument, the self-administered questionnaire (Appendix 8) developed by the researcher for the main study. A pilot study is often referred to as a scaled down version of the full-scale study that assists in establishing the ‘feasibility’ of a study in the research process (Van Teijlingen & Hundley, 2001). It is also a preliminary test of a data collection tool (questionnaire or interview schedule), which helps to identify practical problems associated with its design (Balnaves & Caputi, 2001), as well as the process to be followed.

The pilot study for this current research was conducted from 24 to 27
March 2014. The sample for the pilot study emanated from one of the three primary schools selected for this research study. The choice of school was random, and the selected school was excluded from the main study. The sample size was 69 respondents (n=69: 1 principal, 5 teachers and the parents/primary caregivers of 63 learners) emanating from the identified sample for the main study. Therefore, sixty-nine (69) questionnaires were administered.

The pilot study process commenced with the scheduling of appointments with the principal, teachers, parents/primary caregivers of all learners from Grade R to Grade 3 at the designated primary school. The researcher arranged a meeting with the principal and teachers to explain what the study encompassed and empower the teachers with the necessary clarity to complete the section of the questionnaire that was designed especially for them. The principal held a separate meeting with the teachers and parents/primary caregivers meeting informing them about the study and its commencement. Information sheets and Consent forms were also made available to attendees.

Due the nature of the employment of the parents/primary caregivers of the learners, the principal also sent notification letters to all the learners’ parents/primary caregivers, informing them of the study. Following the instruction of the principal, the teachers placed the notification letters in sealed envelopes and handed them to the learners of each grade. The teachers explained that the letters were for their parents/primary caregivers and asked the learners to place them in their backpacks until the end of the school day.

Because the principal of the school had good relationships with the employers of the learners’ parents/primary caregivers, the employers did not hesitate to allow them (parents/primary caregivers) to be involved in the study; they only required proof of their involvement from the school.
The letters informed the parents/primary caregivers, as well as the employers, of the available dates/times for participation in the study. The principal allocated four days during school time for the study.

The computer room of the school was selected as a venue for the study because it was available, and had sufficient seating for the parents/primary caregivers of the learners to complete the questionnaires. The parents/primary caregivers completed sections (A) and (B) of the questionnaire about their children, while the principal and teachers completed section (C) of the questionnaire, with the permission of the parents/primary caregivers. The teachers and principal completed the questionnaires in a time that was convenient for them during the week of 24 to 27 March 2014. The contact details of the researcher and study supervisors were made available to the respondents in case they needed to make contact.

The pilot study served to assess the reliability of the questionnaire by exploring language options and providing insight into the data collection process. The questionnaires took 35-40 minutes to complete.

The pilot study started four working days after the initial meeting with the principal and teachers. The process was as follows:

1) **Day 1 (Monday, 24 March 2014)**

   The researcher met with the parents/primary caregivers of Grade R learners only. These parents/primary caregivers were 95% Afrikaans speaking and 5% Xhosa speaking. The questionnaire and consent forms were in the English language and the researcher had to explain the consent form and questionnaire in Afrikaans. The questionnaire was also explained to the Xhosa speaking parents/primary caregivers by one of the Afrikaans speaking parents, who was also fluent in the Xhosa language.

   Voluntarily participation was explained to all the respondents,
while their right to withdraw from the study at any given time was clarified, as were the aspects of confidentiality and anonymity. The researcher obtained signed consent forms from all the respondents. Before the respondents started to complete the questionnaire, the researcher requested that they indicate (on the questionnaire) which grade their children were in, for statistical purposes. The parents/primary caregivers took approximately 40 minutes to complete the questionnaire. Where a question was unclear, the researcher provided clarity.

2) **Day 2 (Tuesday, 25 March 2014)**

The researcher met with the parents/primary caregivers of Grade 1 learners only. They were all Afrikaans speaking, making it a little easier for the researcher to explain the questionnaire and consent form. The researcher repeated the same explanation, as per day one, to the Grade 1 respondents, including aspects of confidentiality, anonymity, voluntarily participation, informed consent and withdrawal without prejudice. However, during the data collection on this day, there were two parents, with children in Grade 1, as well as Grade 2, who wanted to know whether they could complete two questionnaires, one for each of their children. The researcher consented, with a one condition, that they indicate the different grade of their children on each respective questionnaire. It took the respondents approximately 35 minutes to complete the questionnaire. As on day 1, where a question was unclear, the researcher provided clarity.

3) **Day 3 (Wednesday, 26 March 2014)**

The researcher met with the parents/primary caregivers of Grade 2 learners only. This group of parents/primary caregivers was Afrikaans speaking, but also understood English, making it even
easier for the researcher to explain the questionnaire and consent form. The same procedure was followed as per the previous two days and the respondents completed the questionnaire in approximately 30 minutes. As on day 1, where a question was unclear, the researcher provided clarity.

4) Day 4 (Thursday, 27 March 2014)

The researcher met with the parents/primary caregivers of Grade 3 learners. Similar to Day 1, two parent/primary caregivers were Xhosa speaking and the rest were Afrikaans speaking. However, the Xhosa speaking parents/primary caregivers in this group also understood Afrikaans, therefore the researcher only needed to explain the questionnaire and consent form in Afrikaans.

As per the previous three days, aspects of confidentiality, anonymity, voluntarily participation, informed consent and withdrawal without prejudice were explained to the respondents. Where a question was unclear, the researcher once again provided clarity. The questionnaires were completed in approximately 35 minutes and were collected by the researcher after each session.

Incidentally, during the data collection process, the researcher observed that some of the parents/primary caregivers were intimidated by the presence of the teachers, who also made use of the venue to complete their class lists and the progress reports of the learners. Curiously, when the researcher and parents/primary caregivers were alone in the venue, all the respondents were actively involved in asking questions concerning the questionnaire, as well as raising some concerns about the teachers. However, as soon as a teacher entered the venue, the respondents fell silent and concentrated in completing the questionnaires. In the researcher’s opinion, it was clear that parents/primary caregivers were
intimidated by teachers.

However, the data obtained from the questionnaires that were completed by the respondents were entered into the Statistical Package for Social Sciences (SPSS version 22). Subsequently, the data were coded, cleaned and checked for errors. Descriptive statistics that included frequencies, percentages, means and standard deviation were used to present the data. Ultimately, the school involved in the pilot did not participate in the main study.

- **Data analysis and subsequent modifications after the Pilot study**

After the analysis of the pilot study, the instrument was checked and double-checked by both study supervisors. The only modification deemed necessary, as a result of the pilot study, was that the questionnaire, which was originated in English, was to be translated into Afrikaans. The main reason for this modification was that Afrikaans is the most dominant language spoken in the TWK region and is also the medium of instruction at government-administered primary schools in the rural area of Grabouw. The translation of the instrument from English to Afrikaans was intended to increase validity of the response rate because the participants were able to express themselves better in Afrikaans than in English. A back-to-back translation was done of the instrument, with assistance of translators at the University of the Western Cape.

- **Data collection for the main study**

The data collection procedure for the main study followed the same approach as the pilot study; however, for the main study both quantitative and qualitative data were collected. The quantitative data were collected by means of self-administered questionnaires (Appendix 8) and the qualitative data by means of semi-structured interviews.

  a) **Quantitative**

   During the quantitative data collection process, a self-administered
questionnaire (Appendix 8) was employed. A questionnaire can be defined as “an instrument of data collection consisting of a standardized series of questions relating to the research topic to be answered in writing by the participants” (Bless & Higson-Smith, 2000, p. 156). According to Neuman (2003, p. 268), a good questionnaire forms an “integrated whole where the researcher weaves questions together, so that they flow smoothly”. The basic objective of a questionnaire is to “obtain facts and opinions about a phenomenon from people, who are informed on the particular issue” (Delport, 2005, p.166).

The questions were phrased in a way that required one response for each question from the respondents. In order to obtain information that could be used in the design of the School Health Index Scorecard, only close-ended (structured) questions, which provided the respondents with a list of responses, ranging from “never” to “almost always”, were included in this questionnaire (Babbie & Mouton, 2006, p. 233). The questionnaires for the main study were distributed to two of the three primary schools selected for this current study. The sample purposively selected for this assessment was 458 parents/primary caregivers of learners and 11 teachers (n=469)

b) Qualitative

During the qualitative data collection process, a semi-structured interview was employed. The reason for choosing the semi-structured interview technique was to encourage the participants to discuss freely their own understanding of psychosocial health and well-being in ECD. A series of questions was developed, in advance, as an interview schedule (Appendix 9), which consisted of 16 open-ended questions that were specifically drafted to achieve the aim and objective of this study. The interview schedule was used as a questionnaire, as well as a guide, to assist with the
conducting of the interviews. This questionnaire was scrutinised by both study supervisors to assess its feasibility for use in this study.

A week before conducting the interviews the researcher supplied information sheets and consent forms to the teachers, via their principals, for voluntarily participation. After receiving the completed consent forms from the principals, the researcher requested an appropriate date and day on which to conduct the interviews with the teachers. The principals informed the researcher that a Wednesday was most appropriate, as it was the day on which the teachers usually attended workshops. Once the interviews were scheduled, the researcher arrived at the school on a Wednesday morning at 10h00 and conducted the interviews during the two break-times, so as not to interfere with class routine of the teachers. Therefore, the semi-structured interviews were conducted with the eight teachers, who consented to voluntarily participation.

Before commencing the interviews, a brief introduction period reiterated the researcher’s name, position, institution and the aim of the study. Subsequently, the researcher introduced the two research assistants, who would be co-facilitating the data collection process. Next, the participants were asked about their position/s and responsibilities, as a way of collecting more detail about them. It was also anticipated that this process would create a relaxing atmosphere to conduct the interviews, as well as facilitate interaction with the participants.

The researcher ensured that all the participants had provided written informed consent (see Appendix 7). The interviews were conducted face-to-face at each participant’s school, respectively, to
obtain first-hand, in-depth information concerning their knowledge and perceptions of psychosocial health and well-being of children in ECD, school health policies, and the support structures that were in place to support learners and their parents. The questions were reasonably open-ended, covering particular topics, and were guided by some general questions to be answered by the teachers. Each interview lasted between 30-35 minutes. The interview techniques utilized in this study were active listening, clarification, linking and reflection. According to Marshall (2006), an interviewer should be excellent at listening skills, question framing, clarification and personal interaction as well as gentle probing for elaboration.

All the interviews were recorded, with the permission of each participant, and hand-written notes of the participant’s responses were recorded by the two research assistants throughout the interviews. The researcher reassured all the participants about the confidentiality of the information that they provided. Pseudo names were used for each participant, to ensure anonymity, and the name of the schools was not disclosed in the study. At the conclusion of each interview, the researcher thanked the participants for their participation and undertook to supply them with a report of the research results.

- **Data Analysis**

According to Krueger and Casey (1995, p. 111), “…data analysis is a messy, ambiguous, time consuming, creative and fascinating process. It does not proceed in a linear fashion; it is not tidy”. Krueger and Casey (2000, p. 127) add, “…analysis begins by going back to the purpose of study. A key principle is that the depth and intensity of analysis is determined by the purpose of the study”. Data analysis is a descriptive process that involves making sense of the text by preparing the data for
analysis, through understanding the data, representing the data and interpreting the larger meaning of the data (Creswell, 2003).

a) Quantitative

De Vos and Fouché (1998, p. 203) are of the opinion that “data analysis in the (quantitative paradigm) entails that the analyst breaks down data into constituents parts to obtain answers to research questions and to test research hypotheses”. Additionally, “the analysis of research data, however, does not in itself provide answers to research questions. Interpretation of the data is necessary” (De Vos, Fouché & Venter, 2002, p. 223). Bless and Higson-Smith (1995, p. 143) assert, “…a statistical analysis is performed in order to infer some properties of the population from the sample results”.

After the completion of the quantitative data collection for this study, the data were entered, coded, cleaned and analysed by means of the Statistical Package in the Social Sciences (SPSS version 22). The data analysis consisted of descriptive statistics, such as frequencies, percentages, means and standard deviations. Inferential statistics included a MANOVA (Bangert & Baumberger, 2005; Kieffer, Reese, & Thompson, 2001; Warne, Lazo, Ramos & Ritter, 2012) for the comparison of groups and a regression analysis to indicate the best predictors of psychosocial health and well-being in ECD at primary schools. The analysis of the quantitative data is discussed in more detail in Chapter Four of this study.

b) Qualitative

According to De Vos (2002b, p. 339), “…qualitative data analysis is a process of bringing order, structure and meaning to the mass of collected data”. Morgan and Krueger (1998, pp. 3-17) assert, “The critical ingredients of qualitative analysis are that analysis
must be systematic, sequential, verifiable and continuous, it
requires time, it is jeopardised by delay, it seeks to enlighten, it
should entertain alternative explanations, it is improved by
feedback, and it is a process of comparison”. The data analysis for
this qualitative assessment was done from a thematic perspective.
Thematic analysis is analysis of the data by emerging themes
(Visagie, 2010).

The participants, who met the criteria for this study, were briefed
on what it entailed. After the participants agreed voluntarily that
they would like to proceed with the study, the data were collected
by means of semi-structured interviews. The semi-structured
interviews were audio recorded, which allowed the researcher to
replay the recordings repeatedly to become thoroughly familiar
with the content, in order to identify the dominant themes and sub-
themes that would emerge from the data. According to
Laimputtong (2011, p.84), the use of the voice recorder allows the
researcher to pay close attention to what the participants are saying
and observe the dynamics at play in the interviews.

The interview transcripts were analysed using thematic analysis.
The various themes and sub-themes that emerged from the data
were coded with descriptive codes that were ‘characteristic of the
data incident they presented’ (De Vos et al, 2011). Verbatim
transcriptions were made of significant statements that the
participants had quoted. To ensure the confidentiality of the
participants, pseudo names were substituted for their names and
the name of the schools were not revealed. This was discussed
with the participants before the commencement of the interviews.
The themes and patterns that emerged from the data analysis were
grouped into categories and summarised, in order to bring meaning
to the text (Bailey & Jackson, 2003). The analysis of the qualitative
3.8.1.2. Stage 2: Systematic Review

Objective 2: Systematically review previous studies to identify the instruments used to assess psychosocial health and well-being in ECD at primary schools.

According to Fink (2010, p. 3), a systematic review of literature is “a systematic, explicit, and reproducible method for identifying, evaluating, and synthesising the existing body of completed and recorded work produced by researchers, scholars, and practitioners”. A definition by Cochrane Collaboration (2013) defines a systematic review as “a high-level overview of primary research on a particular research question that tries to identify, select, synthesize and appraise all high quality research evidence relevant to that question in order to answer it”.

The researcher decided that the articles selected for the systematic review of this study was to be done according to the population, intervention and outcome (PIO) format to improve the relevance of the studies included. Kitchenham (2004) describe PIO as a standardised format for constructing clinical questions to ensure the formation of searchable, answerable questions. The population was Grade R to Grade 3 children in ECD at primary schools, the intervention had to focus on instruments that assessed psychosocial health and well-being in ECD and the outcome was related to how psychosocial health and well-being were currently being measured in ECD at primary schools.

The researcher, therefore, conducted a systematic review on international and national literature of previous studies that used instruments to assess psychosocial health and well-being in ECD at primary schools. The use of electronic databases and journals (such as Science Direct, Medline, PubMed, EMBASE, PSYCHINFO, BioMed Central, ERIC, Cochrane) were employed. The procedure followed for this systematic review is discussed in detail in Chapter Six.

- Inclusion criteria

The reviews that met the following criteria were included in this study:
a. Scholarly publications based in schools;
b. Examined health promotion initiatives for learners;
c. Should have been published in, or translated to, the English language;
d. Included studies that assessed the impact of health promotion in primary schools on aspects of psychosocial health and well-being;
e. Covered both South African and international literature; and
f. Should have been conducted within a ten-year period (2004-2014).

The keywords applied in this systematic review was inclusive of, but not limited to health promotion, psychosocial health, well-being, mental health promotion, instruments, tools, checklist, and measures.

- **Methodological quality appraisal**
  A methodological quality appraisal tool, developed from Roman and Frantz (2013), was used to evaluate the methodological quality of the sampling techniques, response rate, reliability and validity, as well as the data source for the proposed study.

- **Data extraction**
  For the purposes of this study, the researcher designed a data extraction sheet to identify relevant information, such as the author(s) name, country, study design, demographic information, and instruments used. This tool also recorded data on the relationship/association that apparently existed between the guidelines that promote psychosocial health and well-being, and health promotion.

3.8.2. Phase 2: Action Planning

This phase was implemented to gain knowledge concerning the comprehensiveness, effectiveness, and feasibility of the design of a School Health Index Score Card that assesses the psychosocial health and well-being of learners in ECD at primary schools.
3.8.2.1. Stage 1: Designing of the School Health Index Score Card

**Objective 3:** Design a School Health Index Score Card (SHISC) for primary schools, to assess the psychosocial health and well-being of learners in ECD.

- **Design**

  This stage involved the designing of the School Health Index Score Card (SHISC) to assess psychosocial health and well-being for learners in ECD at primary schools. The information gathered in Phase 1 was used as a guide to develop the scorecard in this study, which is discussed, in more detail, in Chapter 7. The researcher designed a School Health Index Score Card (SHISC), along with the assistance of the study supervisors.

  The design of the SHISC of this study was based on a School Health Index (SHI) that was developed by the National Centre for Chronic Disease Prevention and Health Promotion (CDC, 2012) for elementary schools in Atlanta, Georgia, USA. Various literatures indicate that the SHI was probably the first comprehensive tool that was designed specifically for schools, in order to assess and improve the strengths and weaknesses of health promotion policies and school health programmes. The intention of the implementation of the SHI was to develop action plans to improve the overall health of school learners.

  The School Health Index Score Card for this study consists of a 48-item questionnaire (Appendix 14) that covers six domains of psychosocial health and well-being for learners in ECD. The scorecard displays the learner’s name, grade, educator, school and date of assessment. It consists of six subscales on a 3-point Likert scale that ranges from “not in place” to “fully in place”, with each module computing a total score. The subscales are as follows: (i) psychosocial education for teachers; (ii) family support; (iii) community support; (iv) co-curricular support; (v) systems/services; and (vi) safety and protection. The items of the School Health Index Score Card are scored on a scale of 0 to 2. The scorecard uses a denominator of 96 to calculate the overall score percentage,
because the maximum number of points that could be attained is 96. For example, all the circled digits in each of the three columns are added up, vertically, and entered in the allocated row for the column totals. The column totals are added together, horizontally, to arrive at a total number of points, which is divided by the denominator (96 in this instance), and multiplied by 100, to arrive at a percentage. The higher the percentage score, the less intervention is required by the relevant school authority. The lower the percentage score, the more intervention should be implemented.

After the School Health Index Score Card was preliminarily designed, the researcher conducted a focus group discussion with ECD teachers to garner their input and expert opinion concerning the design, content, user-friendliness, effectiveness, comprehensiveness and the simplicity of the language of the draft SHISC.

- **Participants for the Focus group discussion**
  
The participants for the focus group discussion consisted of eight ECD teachers, the same sample that participated in the qualitative assessment process of this study. However, all ethical considerations concerning confidentiality, anonymity, voluntary participation, withdrawal without prejudice and informed consent were maintained, as per the qualitative assessment stage. The participants, again, agreed to participate voluntarily in this stage of the study.

- **Data collection tool**
  
The data collection tool for this stage of the study was the focus group discussion. Masadeh (2012) asserts that the focus group “has become increasingly popular as a tool for social and market research across a wide range of sectors”. According to Masadeh (2012), “the focus group technique is a type of qualitative research methodology, generally defined as a structured discussion with a small group of people, run by a facilitator.
or using a moderating team, to generate qualitative data on a precise topic of interest, using a set of open-ended questions”.

According to Constantine and Bourne (2005), focus groups are used in some studies as one of the research methodologies because of their ability to actually generate items for the development of a questionnaire. A Focus group, therefore, enables the researcher to collect a certain amount of information and opinions from a small number of people, in a short time (Krueger, 1994; Gibbs, 1997; Barrows, 2000; Hines, 2000). According to Creswell (2005, p. 215), the key advantage of focus group interviews is that interaction and cooperation among interviewees, who share similar characteristics, could potentially yield the best and richest information. According to Bless and Higson-Smith (2000, p. 110) a focus group consists of three to four respondents who are interviewed together. In this current study, a focus group was conducted with 8 teachers in ECD at primary schools in the TWK. This focus group was used to obtain the expert opinion of the teachers concerning the design, content, user friendliness, effectiveness, comprehensiveness and the simplicity of the language of the drafted School Health Index Score Card (SHISC), which assesses psychosocial health and well-being of learners in ECD at primary schools.

The researcher conducted the focus group discussion with the aid of a semi-structured interview schedule. According to Holstein and Gubrium (1995, p. 76), “a questionnaire written to guide interviews is called an interview schedule or guide. This provides the researcher with a set of predetermined questions that might be used as an appropriate instrument to engage the participant and designate the narrative terrain”. Grbich (1999, pp. 93-94) asserts, “…guided interviews comprise a set of broad-ranging questions derived from theory, previous research, and intuition (notion that the interviewer has in mind from his/her own experience and that require exploration)”. The questions in the schedule were directed at
testing the drafted SHISC.

**Data collection procedure**

McMillan and Schumacher (2001) assert that a focus group interview creates a social environment, in which group members are stimulated by each other’s ideas. Due to time constraints for the planned focus group, because of workshops planned by their principals for the same day, the primary goal of the focus group session for this study was not to generalise, but simply to use the information obtained, as a step to assist in the overall design of the SHISC.

For the purpose of this stage, the researcher utilized a semi-structured interview schedule, with questions relating to the SHISC, to communicate effectively with the participants, regarding the concept and design of the SHISC. Prior to the commencement of the actual focus group, the group discussion questions of the interview schedule were pre-tested with 2 of the 8 teachers, who also participated in the main focus group, in order to establish the key considerations about reliability and validity. The questions in the interview schedule included those addressed by Dreachslin (1999, p. 228):

- Is the meaning of the question clear?
- Do the questions use terminology that is understandable to the participants?
- Does each question ask only about one topic?
- Do the questions reflect any hidden bias, or ‘lead’ the participants?

Any repetitive questions, identified by the participants, concerning the SHISC were weeded out. Additionally, the participants also requested that the score card be translated into Afrikaans, which is the dominant language spoken in the TWK region.
The group granted permission for the interview to be audio-taped. Field notes were also taken by two research assistants to supplement the audio-tapes. According to Gay and Airasian (2003, p. 223), field notes describe what the observer has heard, seen, experienced and thought about, during an observation. In addition, field notes should be detailed and descriptive, capturing the reality of the setting and participants, as they are the basis for data collection and analysis.

During the focus group session, a considerable number of different ideas were generated concerning the overall design of the SHISC. Different viewpoints were obtained from the teachers through the focus group interview, as they shared a common background and were mustered to offer their expert opinion concerning the proposed SHISC. Additionally, this process served to identify any problems and omissions, and determined the time that was required to complete the School Health Index Score Card.

The sharing of ideas in this focus group discussion was necessary, as the participants fulfilled vital roles in Early Childhood Development. The purpose of the focus group discussion, therefore, was to obtain constructive feedback on the concept and design of the School Health Index Score Card from Early Childhood Development teachers, who are probably the best equipped to provide a more complete picture of the problems identified in ECD.

- **Data Analysis**

Gay and Airasian (2003, p. 239) assert that data analysis and data collection take place simultaneously. According to these authors, the initial step in data analysis is managing the data, so that it can be studied. They further substantiate that the researcher cannot interpret data until the data are broken down and classified in some way. They also claim that the analysis itself requires four iterative steps, namely reading/memoing,
describing, classifying, and interpreting, which is a cyclical process that focusses on becoming familiar with the data, in order to identify the main themes that emerge from it.

McMillan and Schumacher (1993, p. 479) aver that qualitative data analysis is an inductive process of organising data into categories and, subsequently, identifying patterns among the categories. This implies that categories and patterns must emerge from the data, and not be imposed on the data, prior to data collection. The researcher, therefore, becomes the data interpreter, digesting the contents of qualitative data and finding common threads therein.

In addition, Miles and Huberman (1994, pp. 428-444) suggest that data analysis consists primarily of three linked sub-processes, namely data reduction, data display and conclusion drawing, or verification. According to Creswell (1994, pp. 150-154), data analysis needs plenty of well-informed practice and grounding of data manipulation skills, and central to this process is a focus on data reduction and data interpretation. According to Tesch (1990), data analysis is described as “eclectic”, implying that there is no one correct way to analyse the data. In the case of this study, the data were captured by the two research assistants, using an audio tape recorder. Additional field notes containing non-verbal and verbal observations were also recorded by the two research assistants. The interviews were transcribed and the transcriptions checked against the audio recordings to ensure that all the data had been accounted for.

The data were categorised and coded; and the themes were recorded as they emerged. The data were searched for regularities, patterns and topics. Words and phrases were recorded to represent these topics and patterns. The data were divided into categories and sub-categories. The categories and themes that emerged from the data were coded, suggesting that data analysis is the process of making the data more manageable, by organising the collected data into categories, while interpreting the data,
in search of recurring patterns, to determine the importance of relevant information (Marshall & Rossman, 1999, p.150). Several themes emerged from the data as the researcher used thematic analysis to analyse the data. The data was cross-checked by the supervisors of the study, to ensure the objectivity, reliability, as well as validity of the results.

Based on the documented information gathered from the focus group discussion, narrative descriptions were made of the content, after carefully listening to the audio voice recordings, while also taking into consideration the personal notes and reports of the research assistants. Five themes and five sub-themes were identified based on the related information that emerged from the study. The data analysis process is comprehensively discussed in Chapter 7.

3.8.2.2. Stage 2: Delphi Study

The Delphi study process is the final stage of this study. The Delphi was developed as a tool for forecasting future events, using a series of questionnaires, combined with controlled opinion feedback. In that study, the participants, all experts in national defence, were asked to impart their opinions on the probability, frequency and intensity of possible enemy attacks. They all offered their feedback, anonymous to each other. The process was repeated several times, until a consensus was reached. (Dalkey, 1969; Dalkey & Helmer, 1963).

Keeney, Hasson & McKenna (2001) define a Delphi method (DM) as, “a systematic technique which aims to engage a large number of experts (i.e. those who specialise in a particular field of interest or who have knowledge about a specific subject) in a process to obtain consensus of opinion or judgment on a topic where the required information is incomplete or scarcely available”. Fish and Busby (1996) suggest that the objective of this method is to gain the most reliable consensus from a panel of experts. This method is one of the most effective means of facilitating communication between experts in a particular field, as it allows effective discussions on a topic, without having to meet in one location (Castaños, 2010). Castaños (2010) describes the Delphi as a process to
gather information from experts and find consensus among them. In this current study, the Delphi technique was used to assess the feasibility, effectiveness and practicality of the drafted SHISC. Chapter 7 provides a detailed discussion concerning the Delphi study.

- **Participants**
  The participants for the Delphi consisted of teachers, principals, nurses, health promotion officers, psychologists, social workers and experts in ECD. A letter of invitation for participation in the Delphi study (Appendix 10) was electronically sent to 20 stakeholders in ECD, to which 17 (7 teachers, 2 social workers, 2 Prof/Drs of Psychology/Counsellors, 1 Health Promotion Officer, 1 Principal, 2 Nurses & 2 ECD Practitioners) responded and consented to participate voluntarily in the process. The Delphi participants were purposively selected to apply their knowledge and experience to a particular issue (the drafted SHISC), based on set criteria (Akins, Tolson & Cole, 2005).

- **Data Collection Procedures**
  After informed consent (Appendix 11) was obtained from the 17 voluntary ECD stakeholders, the researcher emailed the drafted SHISC (Appendix 12) to them, together with a formal and structured questionnaire (Appendix 13) for their expert opinion. The questionnaire consisted of 3 sections – section 1 requested the demographical information of the participants; section 2 was 8 closed ended questions on a 5 point Likert scale; and section 3 was 4 open-ended questions. In section 3, the participants were expected to make any suggestions and recommendations regarding the content, overall structure and comprehensiveness of the SHISC. All responses were kept confidential.

- **Data Analysis**
  The quantitative data (section 2 of the questionnaire) obtained from the Delphi was coded, cleared and analysed using the Statistical Packages for Social Sciences version 23 (SPSS version 23). This was done by means of
central tendency, or mean/median, analysis and through the level of dispersion (standard deviation and inter-quartile range), to present the information concerning the collective judgments of the respondents. The qualitative data (section 3 of the questionnaire) obtained from the ECD stakeholders in the Delphi study was analysed by means of thematic analysis in response to the specific questions. The researcher informed all the participating ECD stakeholders that consensus was reached at the end of Round 2.

3.9. Validity and Reliability

Validity and reliability are the most important criteria to ensure that the quantitative research instrument is adequately evaluated (Polity, Beck & Hungler, 2001). However, according to Babbie and Mouton (2001, pp. 119-122), validity is the extent to which an empirical measure accurately reflects the real meaning of the concept being considered, and it is also used to estimate the true reflection of the results. Additionally, these authors describe reliability as the quality of the measurement method, suggesting that similar data would be consistently and frequently collected by means of questionnaires to the same subjects. Based on the results of the pilot study, the research instrument was reliable, valid and suitable for the purpose of the main study.

3.10. Trustworthiness

Various strategies were employed to enhance the trustworthiness of the qualitative approach used for this study. These strategies, as mentioned by Lincoln and Guba (1985), are: (i) credibility; (ii) transferability; (iii) dependability; and (iv) conformability.

3.10.1. Credibility

According to these authors, Credibility refers to the truthfulness of the findings compared with reality. According to Sherman & Strang (2004), credibility signifies how congruent the research findings are with reality. Member checks were performed to ensure the credibility of the information received from the participants of the study. The researcher granted the participants the opportunity to summarise the interviews that were conducted.
3.10.2. Transferability

Marshall and Rossman (1999) refer to Transferability as “the degree to which qualitative results can be generalised or transferred to other populations”. The aspect of transferability was maintained as the data collected from various sources (active listening, field notes and audio recordings) were used to “corroborate, elaborate and illuminate the research in question” (De Vos et al, 2011, p. 420).

3.10.3. Dependability

Makin (2015, p. 108), asserts that Dependability and Conformability are interrelated concepts. Dependability examines the process of inquiry and Conformability examines the validity of the findings. According to Gasson (2004, p. 94), the dependability of the findings can be ensured through clear and repeatable procedures, concerning the manner in which the research is conducted. Additionally, by “making explicit the process through which findings are derived is a useful way of ensuring their dependability” Gasson (2004, p. 94). Zhang and Wildemuth (2009, p. 7) concur that in order to establish dependability, the “consistency of the study processes” needs to be demonstrated. In this current study, the following dependability strategies were implemented to ensure to increase the consistency:

- The research methods applied were described in detail; and
- Field notes, transcripts of interviews, as well as audio recordings were used and made available to the study supervisors for clarification

Additionally, all ideas that emerged from the discussions were triangulated by the researcher and the participants (Creswell & Miller, 2000, pp. 124-131). According to Shenton (2004, p. 73), an in-depth description of all the methods used to collect and analyse data is provided to allow for the “integrity of research results to be scrutinised”. Wiersma (2000, pp. 251-252) assert that “triangulation is qualitative cross-validation. It assesses the sufficiency of data according to the convergence of multiple data sources or multiple data collection procedures”. The following multiple methods were used as data sources for this study were:

- Baseline assessment (quantitative) by means of self-administered questionnaires
to parents/primary caregivers and teachers/principals;

- Baseline assessment (qualitative) by means of semi-structured interviews with teachers regarding their perceptions, knowledge, policies and guidelines of psychosocial health and well-being in ECD at primary schools;

- A systematic review on previous studies conducted on available instruments that assesses psychosocial health and well-being of children in ECD;

- Focus group interview with teachers concerning the effectiveness, comprehensiveness and language friendliness of the proposed SHISC;

- A Delphi study concerning the effectiveness, comprehensiveness and feasibility of the proposed SHISC for primary schools.

Tesch (1990, p.97) avers that the final goal of the researcher is triangulation, when the information gathered, emerges as a larger picture.

3.10.4. Conformability

Teddlie and Tashakkori (2009) state that Conformability refers to the extent to which inferences can be confirmed and corroborated with others. In this current study, the researcher documented the procedures of the data analysis, as the data obtained from this study were shared with the research supervisors for constructive criticism throughout the entire process, to ensure conformability. The supervisors, therefore, examined the research findings, the interpretations, as well as recommendations, and ensured that they were supported by the data. According to Walle (2015, p. 141), conformability is a useful measure and it is widely used in triangulation, a major means of building credibility for qualitative research. Alternatively, regarding this study, conformability can be referred to as a degree to which others agree with the conclusions of this research project.

3.11. Conclusion

The methodological framework for this study was discussed in this chapter. A mixed method design was selected to provide detailed representation of the research problem. The methodological design is sequential explanatory, with the quantitative phase being
followed by the qualitative phase. This chapter also provided information concerning the different stages of the research process, such as population and sampling, data collection procedure and data analysis in the two phases, with 2 stages each.

The following chapters (4 & 5) provide the results of the both quantitative and qualitative data analysis. Chapter 6 describes the systematic review of previous literature to identify instruments that were previously used to assess psychosocial health and well-being in ECD at primary schools. The second phase of this study, Action Planning (incorporating the 2 stages: Design of the School Health Index Scorecard; and the Delphi study) is fully discussed in Chapter 7.
CHAPTER FOUR

FINDINGS: QUANTITATIVE DATA

4.1. Introduction

This chapter contains the statistical findings related to the perceptions of parents/caregivers, teachers and principals, concerning health promotion practices and the psychosocial health and well-being of learners in ECD at primary schools. The data collection tool was divided into three sections with Section A presenting the demographical data of the sample involved in this study; Section B providing information about the bodily/physical functioning, social functioning, emotional functioning and school functioning of the learners in ECD at primary schools; and Section C presenting information about the emotional behavioural problems, age-group behavioural problems, behavioural problems and hyperactive behavioural problems of the learners in ECD at primary schools. The information for Sections A and B was collected from the selected parents/primary caregivers of the learners (n = 458). The information for Section C was collected from the selected teachers (n = 11). The data analysis consists of descriptive statistics, such as frequencies, percentages, means and standard deviations. The chapter concludes with a summary of the main findings of the study.

4.2. SECTION 1: Demographic Information

Table 4.1: Demographic information (n=458)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n = 458</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>224</td>
<td>48.9</td>
</tr>
<tr>
<td>Female</td>
<td>234</td>
<td>51.1</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade R</td>
<td>78</td>
<td>17.6</td>
</tr>
<tr>
<td>Grade 1</td>
<td>111</td>
<td>25.0</td>
</tr>
<tr>
<td>Grade 2</td>
<td>120</td>
<td>27.0</td>
</tr>
</tbody>
</table>
Table 4.1 shows the demographic information of the respondents’ children. The table indicates that 234 (n = 234 - 51.1%), the majority of the learners, were female and 224 (n = 224 - 48.9%) were male, with a mean age of 7.70 (M = 7.70, SD=1.40), as indicated by the parents/primary caregivers, with a final population of 458 (n = 458). The majority of the respondents’ children were in grade 3 (n=135 - 27.5%) and most of the sample identified themselves, according to Statistics South Africa, as Coloured [Mix ethnicity] (n = 436 - 95.5%). Similarly, the majority of the respondents indicated that their home language was Afrikaans.
Afrikaans (n = 441 - 95.7%) that most of the learners lived with both parents (n = 248 - 53.6%).

4.3 SECTION 2: Functioning of learners in ECD

The psychosocial health and well-being of the learners was assessed using the PedsQL adapted version for a South African context, that consisted of four functioning scales (i) physical (ii) social (iii) emotional and (iv) school functioning subscales. The respondents were asked to answer the questions on a five-point Likert scale ranging from “never” to “almost always”

4.3.1 Bodily/Physical Functioning

The items for this section focused on the different physical activities undertaken by the learner at home and at school. These activities are summarized in Table 4.2 with the distribution of frequencies for each response option.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child participate in sport activities or physical exercise at school?</td>
<td>Never</td>
<td>119</td>
<td>26.6</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>123</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>91</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>114</td>
<td>25.5</td>
</tr>
<tr>
<td>Does your child shower or bath by himself/herself?</td>
<td>Never</td>
<td>23</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>36</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>172</td>
<td>37.4</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>229</td>
<td>49.8</td>
</tr>
<tr>
<td>Does your child experience low energy levels?</td>
<td>Never</td>
<td>304</td>
<td>68.5</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>79</td>
<td>17.8</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>31</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>30</td>
<td>6.8</td>
</tr>
<tr>
<td>Does your child do household chores?</td>
<td>Never</td>
<td>45</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>117</td>
<td>26.0</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>136</td>
<td>30.2</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>152</td>
<td>33.8</td>
</tr>
</tbody>
</table>

Respondents responded on a 4-point Likert scale with 1 = Never, 4 = Always

The results reveal that 27.5% of the parents/carers indicated that their children seldom participated in sporting activities, or physical activities at school. In addition, 37.4% of these parents/primary caregivers indicated that their children regularly showered, or
bathed, by themselves. Some of the respondents (68.5%) indicated that their children never experienced low energy levels, with 33.8% indicating that their children always did household chores.

4.3.2. Social functioning

Most of the items in this section of the questionnaire related to how children function socially, at home and at school, as summarized in Table 4.3. The majority of the respondents (77.9%) indicated that their children never had difficulty in making friends at home, or at school (77.0%), with 73.2% indicating that their children always got along with other children at home. However, there was a slight difference in response to whether their children tired quickly when playing with other children at school (69.9%), or at home (69.8%). Many of the respondents (64.0%) indicated further that their children could always manage daily activities, such as cleaning their desks or identifying colours, at school, and always (63.0%) got along with other children at school. Although the respondents indicated that their children always (61.7%) completed their tasks, given as homework, (59.6%) indicated that their children always completed daily tasks that were given in the classroom.

Several respondents (58.8%) reported that their children always managed daily activities, such as packing away toys and tossing dirt in the dirtbin, at home, and always (54.2%) had the ability to complete daily tasks, like packing away toys or packing their bags at home. The respondents were asked whether their children were teased by other children at home. A number of respondents (52.9%) replied that their children were never teased at home, while 51.9% also informed that their children always listened at school and were never (51.6%) teased at school. The respondents (50.7%) also reported that their children always paid attention at school, and (46.8%) always paid attention and (39.3%) listened at home.
Table 4.3: Social functioning (n=458)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child get along with other children at home?</td>
<td>Never</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>24</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>89</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>339</td>
<td>73.2</td>
</tr>
<tr>
<td>Does your child get along with other children at school?</td>
<td>Never</td>
<td>16</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>21</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>133</td>
<td>29.0</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>289</td>
<td>63.0</td>
</tr>
<tr>
<td>Does your child have difficulty in making friends at home?</td>
<td>Never</td>
<td>356</td>
<td>77.9</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>48</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>15</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>38</td>
<td>8.3</td>
</tr>
<tr>
<td>Does your child have difficulty in making friends at school?</td>
<td>Never</td>
<td>349</td>
<td>77.0</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>72</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>12</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>20</td>
<td>4.4</td>
</tr>
<tr>
<td>Does your child get teased by other children at home?</td>
<td>Never</td>
<td>243</td>
<td>52.9</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>158</td>
<td>34.4</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>31</td>
<td>6.8</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>27</td>
<td>5.9</td>
</tr>
<tr>
<td>Does your child get teased by other children at school?</td>
<td>Never</td>
<td>230</td>
<td>51.6</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>145</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>33</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>38</td>
<td>8.5</td>
</tr>
<tr>
<td>Can your child manage daily activities (e.g. packing away toys, throw dirt in the dirtbin) at home?</td>
<td>Never</td>
<td>20</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>54</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>118</td>
<td>25.3</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>274</td>
<td>58.8</td>
</tr>
<tr>
<td>Can your child manage daily activities (e.g. cleaning his/her desk or identify colours) at school?</td>
<td>Never</td>
<td>15</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>36</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>113</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>292</td>
<td>64.0</td>
</tr>
<tr>
<td>Does your child get tired quickly when playing with other children at home?</td>
<td>Never</td>
<td>324</td>
<td>69.8</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>88</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>22</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>30</td>
<td>6.5</td>
</tr>
<tr>
<td>Variable</td>
<td>Rating Scale</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Does your child get tired quickly when playing with other children at school?</td>
<td>Never</td>
<td>320</td>
<td>69.9</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>87</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>30</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>21</td>
<td>4.6</td>
</tr>
<tr>
<td>Does it seem as though your child listens at home?</td>
<td>Never</td>
<td>45</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>99</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>132</td>
<td>29.0</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>179</td>
<td>39.3</td>
</tr>
<tr>
<td>Does it seem as though your child listens at school?</td>
<td>Never</td>
<td>18</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>61</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>131</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>179</td>
<td>39.3</td>
</tr>
<tr>
<td>Does it seem as though your child pays attention at home?</td>
<td>Never</td>
<td>26</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>69</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>145</td>
<td>32.2</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>227</td>
<td>51.9</td>
</tr>
<tr>
<td>Does it seem as though your child pays attention at school?</td>
<td>Never</td>
<td>16</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>57</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>142</td>
<td>32.6</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>221</td>
<td>50.7</td>
</tr>
<tr>
<td>Does your child complete daily task (e.g. packing away toys or packing his/her bag) at home?</td>
<td>Never</td>
<td>25</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>65</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>120</td>
<td>45.8</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>249</td>
<td>54.2</td>
</tr>
<tr>
<td>Does your child complete daily tasks that are given in the classroom?</td>
<td>Never</td>
<td>18</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>47</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>115</td>
<td>25.8</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>266</td>
<td>59.6</td>
</tr>
<tr>
<td>Does your child complete the tasks that are given as homework?</td>
<td>Never</td>
<td>28</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>31</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>114</td>
<td>25.2</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>279</td>
<td>61.7</td>
</tr>
</tbody>
</table>

Respondents responded on a 4-point Likert scale with 1=Never, 4=Always

4.3.3. Emotional functioning

Table 4.4: Emotional functioning (n=458)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>Never</td>
<td>Seldom</td>
<td>Regularly</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>Does your child feel afraid or fearful at home?</td>
<td>359</td>
<td>59</td>
<td>16</td>
</tr>
<tr>
<td>Does your child feel afraid or fearful at school?</td>
<td>329</td>
<td>78</td>
<td>27</td>
</tr>
<tr>
<td>Does your child feel sad or upset at home?</td>
<td>337</td>
<td>93</td>
<td>12</td>
</tr>
<tr>
<td>Does your child feel sad or upset at school?</td>
<td>317</td>
<td>84</td>
<td>24</td>
</tr>
<tr>
<td>Does your child feel angry at home?</td>
<td>303</td>
<td>124</td>
<td>20</td>
</tr>
<tr>
<td>Does your child feel angry at school?</td>
<td>308</td>
<td>109</td>
<td>12</td>
</tr>
<tr>
<td>Does your child have trouble sleeping at night?</td>
<td>368</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Does your child feel tired?</td>
<td>276</td>
<td>142</td>
<td>23</td>
</tr>
<tr>
<td>Does your child feel restless?</td>
<td>321</td>
<td>94</td>
<td>21</td>
</tr>
</tbody>
</table>
Does it seem as though your child is worried about what will happen to him/her at home?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>351</td>
<td>76.5</td>
</tr>
<tr>
<td>Seldom</td>
<td>75</td>
<td>16.3</td>
</tr>
<tr>
<td>Regularly</td>
<td>15</td>
<td>3.3</td>
</tr>
<tr>
<td>Always</td>
<td>18</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Does it seem as though your child is worried about what will happen to him/her at school?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>291</td>
<td>64.5</td>
</tr>
<tr>
<td>Seldom</td>
<td>102</td>
<td>22.6</td>
</tr>
<tr>
<td>Regularly</td>
<td>25</td>
<td>5.5</td>
</tr>
<tr>
<td>Always</td>
<td>33</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Respondents responded on a 4-point Likert scale with 1=Never, 4=Always

The data depicted in Table 4.4 shows that the majority of the respondents (80.5%) indicated that their children never had trouble sleeping at night and that their children (78.6%) never felt afraid or fearful at home or at school (73.1%). Several respondents (76.5%) disclosed that their children never felt worried about what would happen to them at home, or at school (64.5%). The results reveal that 74.2% of the children never felt sad or upset at home, and 72.7% never at school, while 70.0% were never angry at school, compared with 66.2% at home. Of the respondents, approximately 71.0% indicated that their children were never restless at school and 60.4% that their children are never tired at home.

4.3.4. School functioning

Table 4.5: School functioning (n=458)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your child pay attention in class?</td>
<td>Never</td>
<td>28</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>50</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>136</td>
<td>32.1</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>210</td>
<td>49.5</td>
</tr>
<tr>
<td>Does your child have the tendency to forget things (e.g. lunch or communication book) at home?</td>
<td>Never</td>
<td>311</td>
<td>69.1</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>91</td>
<td>20.2</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>25</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>23</td>
<td>5.1</td>
</tr>
<tr>
<td>Does your child have the tendency to forget things (e.g. clothing or lunch tin) at school?</td>
<td>Never</td>
<td>291</td>
<td>64.8</td>
</tr>
<tr>
<td></td>
<td>Seldom</td>
<td>110</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>Regularly</td>
<td>17</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>31</td>
<td>6.9</td>
</tr>
<tr>
<td>Question</td>
<td>Never</td>
<td>Seldom</td>
<td>Regularly</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>Is your child absent from school due to illness?</td>
<td>91</td>
<td>211</td>
<td>44</td>
</tr>
<tr>
<td>Does your child stay absent from school to go to the doctor or hospital?</td>
<td>99</td>
<td>188</td>
<td>45</td>
</tr>
<tr>
<td>Does the school provide nutritious support to your child (ren)?</td>
<td>36</td>
<td>25</td>
<td>96</td>
</tr>
<tr>
<td>Does the school have referral system for your child (ren) in case of emergencies?</td>
<td>30</td>
<td>36</td>
<td>66</td>
</tr>
<tr>
<td>Does the school have clean and safe water to drink, cook, and for learners and staff to wash their hands?</td>
<td>14</td>
<td>11</td>
<td>66</td>
</tr>
<tr>
<td>Does the school have adequate and clean toilets for the learners and staff?</td>
<td>26</td>
<td>44</td>
<td>82</td>
</tr>
<tr>
<td>Does the teachers/educators discuss children’s health issues/problems with parents/or carers?</td>
<td>38</td>
<td>63</td>
<td>94</td>
</tr>
<tr>
<td>Does the school make provision for immunisations (injections)?</td>
<td>32</td>
<td>29</td>
<td>92</td>
</tr>
</tbody>
</table>

Respondents responded on a 4-point Likert scale with 1=Never, 4=Always

Table 4.5 shows that 80.0% of the respondents advised that the schools *always* had clean and safe water to drink, cooked and the learners and staff always washed their hands.
hands. Two hundred and ninety seven (66.1%) respondents indicated that the schools always had adequately clean toilets for both learners and staff. Three hundred and three (69.7%) respondents reported that the schools always had a referral system for children, in case of emergencies. The respondents were asked whether their children have the tendency to forget things (for example, lunch or communication book) at home and at school. Three hundred and eleven (69.1%) reported that their children never had the tendency to forget these items at home, and two hundred and ninety one (64.8%) indicated that their children never forgot things (for example, clothing or lunch tins) at school. The respondents were also asked whether the schools made provision for immunisations (injections), nutritious support, health check-ups, tests, and whether teachers/educators discussed children’s health issues/problems with them. Two hundred and ninety four (65.8%) respondents indicated that the school always made provision for immunisation (injections), while two hundred and ninety three (65.1%) informed that the school always provided nutritious support to their children. Two hundred and sixty three (59.5%) of the respondents indicated that the school always made provision for health check-ups and tests for their children. Two hundred and fifty six (56.8%) of the respondents indicated that the teachers/educators always discussed children’s health issues/problems with parents/primary caregivers.

4.4 SECTION 3: Behavioural problems of learners in ECD

The psychosocial health and well-being of learners was assessed using the SDQ adapted version for a South African context, that consisted of five functioning scales (i) emotional (ii) peer (iii) conduct(iv) pro-social and (v) hyperactive behavioural problems subscales. The respondents (11 teachers) were ask to answer the questions on a three-point Likert scale ranging from “not true” to “somewhat true”

4.4.1. Emotional behavioural problems

<table>
<thead>
<tr>
<th>Table 4.6: Emotional behavioural problem (n=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Children sometimes complain of headaches, stomach-aches or feeling sick</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Children have many worries (e.g. not completing their homework or if someone will be able to fetch them from school).

<table>
<thead>
<tr>
<th></th>
<th>Not true</th>
<th>Somewhat true</th>
<th>True</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children often seem to be worried.</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Children often feel unhappy, depressed and cry a lot.</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Children seem to be nervous or afraid in new situations.</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Children easily lose their confidence/faith.</td>
<td>3</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>The school helps the parents foster a positive attitude toward their children’s abilities.</td>
<td>3</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Respondents responded on a 3-point Likert scale with 1 = Not true, 3 = True

The results in Table 4.6 shows that teachers were ask to report on whether the schools help parents/primary caregiversto foster a positive attitude toward their children’s ability. Eight (72.7%) of the teachers indicated that it was true. Seven (63.6%) of the teachers indicated that it was somewhat true for children to be nervous or afraid in new situations. Six (60.0%) teachers indicated it was somewhat true that children easily lost their confidence or faith. Remarkably, five (45.5%) teachers indicated it was somewhat true that children worried about not completing their homework, or whether someone would be able to collect them from school. Five (45.5%) teachers reported it was not true that children felt unhappy, depressed and cried very much.

Remarkably, again, four (44.4%) teachers indicated that it was not true for children to be worried, while the same percentage (44.4%), indicated that it was somewhat true. Another peculiarity concerning the responses of the teachers was that four (36.4%) replied true that children sometimes complained of headaches, stomach aches or feeling sick, while the same percentage (36.4%) perceived this as not true.
4.4.2. Peer/age-group behavioural problems

Six items assessed peer behavioural problems as summarized in Table 4.7.

Table 4.7: Peer/age-group behavioural problems (n=11)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children in general seem to be lonely.</td>
<td>Not true</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>Children prefer playing alone</td>
<td>Not true</td>
<td>9</td>
<td>90.0</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>Children generally have at least one good friend.</td>
<td>Not true</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>Children generally seem to seek positive affirmation from other children.</td>
<td>Not true</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td>Children communicate better with adults than with other children</td>
<td>Not true</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Children are active participants in the learning process (e.g.</td>
<td>Not true</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>verbal presentations, given the opportunity to, draw simple</td>
<td>Somewhat true</td>
<td>3</td>
<td>27.3</td>
</tr>
<tr>
<td>drawings on the board or raise their thoughts and ideas).</td>
<td>True</td>
<td>7</td>
<td>63.6</td>
</tr>
</tbody>
</table>

Respondents responded on a 3-point Likert scale with 1=Not true, 3=True

All the teachers (100%, n=11) indicated not true for ‘children generally have at least one good friend’. Nine (90.0%) teachers indicated not true for ‘children prefer playing alone’. Seven (63.6%) teachers indicated true for ‘children are active participants in the learning process’ (for example, verbal presentations, given the opportunity to draw simple drawings on the board or raise their thoughts and ideas). A similar amount, seven (63.6%), indicated not true for ‘children in general seem to be lonely’. Six (54.5%) teachers indicated true for ‘children generally seem to seek positive affirmation from other children’, as well as not true (54.5%) for ‘children communicate better with adults than with other children’.
4.4.3. Behavioural problems

The items for this section focus on conduct behavioural problems of children in ECD as perceived by their teachers. Table 4.8 shows that all teachers (100%) indicated not true for ‘children use physical violence against teachers/educators’, while nine (81.8%) teachers indicated not true for ‘children use crude or vulgar language towards teachers/educators’. Seven (70.0%) teachers indicated somewhat true for ‘children to tell lies or copy. Whether children seem to be kinder towards younger children, six (66.7%) teachers indicated that it is true. In addition, six (60.0%) teachers indicated that it is somewhat true that children are often irritated by other children, followed by the same percentage (60%) of teachers who indicated that it is true that children often fight, followed by (60%) who indicated that it is somewhat true that there are children who steal at school. Similarly, six (60%) of the teachers indicates further that it is true that children usually complete the task (e.g. inform parents/carers of meetings at school); and children freely share with others and that children willingly volunteer to help others. Although five (50.0%) teachers indicate that it is true that the school is actively involved in rejection of physical violence against children, five (50.0%) of the teachers indicate that it is true that the school is actively involved in the rejection of verbal violence against children. Likewise, indicate five (50.0%) teachers that it is somewhat true that schools are actively involved in the rejection of verbal language against children as well. Five (50.0%) teachers indicate further that it is somewhat true for children to consider the feelings of others, but it is true that children seem helpful when someone has been injured or is upset or sick. In addition, five (50.0%) teachers have indicated that it is true that children usually complete tasks given (e.g. inform teachers of appointments during school times given by his or her parents/carers. It is noted that the same (50.0%) percentage of teachers indicate it to be somewhat true.

### Table 4.8: Behavioural problems (n=11)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children are often irritated by other children.</td>
<td>Not true</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>6</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>Statement</td>
<td>Not true</td>
<td>Somewhat true</td>
<td>True</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------</td>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td>Children usually complete the tasks (e.g. inform teachers/educators of appointment during school times given by his/her parents/carers).</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Children usually obeys/complete the tasks (e.g. inform parents/carers of meetings at school given by his/her teacher/educator.</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Children often fight.</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Children often tell lies or copy.</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>There are children who steal at school.</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Children use physical violence against teachers/educators.</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children use crude or vulgar language towards teachers/educators.</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The school is actively involved in rejection of physical violence against children.</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The school is actively involved in the rejection of verbal violence against children.</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Children consider the feelings of others.</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Children freely share with others</td>
<td>4</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Children seem helpful when someone has been injured or is upset or sick.</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Children seem to be kinder towards younger children.</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Table 4.9: Hyperactive behavioural problems (n=11)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rating Scale</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children seem restless, overly active or cannot keep quiet for long.</td>
<td>Not true</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>6</td>
<td>66.7</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children seem constantly fidget.</td>
<td>Not true</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children’s attention is easily distracted.</td>
<td>Not true</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children lose concentration easily.</td>
<td>Not true</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children seem to pay attention when completing class work activities.</td>
<td>Not true</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>8</td>
<td>88.9</td>
</tr>
<tr>
<td></td>
<td>True</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.9 shows that eight teachers indicated that it are somewhat true (88.9%) that children seem to pay attention when completing classwork activities. Whereas seven (77.8%) indicated that it is somewhat true that children seem to be constantly fidgeting. Six (66.7%) indicated further that it is true that children seem restless, overly active and cannot keep quiet for long. However, similar results by five (55.6%) teachers, indicates that it is somewhat true that children’s attention is easily distracted and that children loses concentration easily.
4.5. Parents/primary caregivers' perceptions of perceived problems

The results for the parents/primary caregivers observations of the perceived behavioural problems related to the psychosocial health and well-being of their children in ECD are presented in Table 4.10.

Table 4.10. Parents/primary caregivers’ perceptions of perceived problems

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Perceived Problem in ECD</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents/primary caregivers</td>
<td>School functioning</td>
<td>370</td>
<td>2.92</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td>Emotional functioning</td>
<td>401</td>
<td>1.38</td>
<td>.43</td>
</tr>
<tr>
<td></td>
<td>Social functioning</td>
<td>374</td>
<td>2.71</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td>Physical functioning</td>
<td>414</td>
<td>2.53</td>
<td>.52</td>
</tr>
</tbody>
</table>

The majority rated school functioning ($M = 2.92, SD = .42$) to always be a problem. Similar results were found for social functioning ($M = 2.71, SD = .33$) and physical functioning ($M = 2.53, SD = .52$). Emotional functioning ($M = 1.38, SD = .43$) was rated by the majority as a problem least experienced by their children.

4.6. Teachers' perceptions of perceived problems

Table 4.11 presents the results for the teachers’ observations of the perceived behavioural problems related to psychosocial health and well-being of learners in ECD.
Table 4.11: Teachers perceptions of perceived problems in ECD

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Perceived problem</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers:</td>
<td>Emotional behavioural problems</td>
<td>9</td>
<td>1.98</td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td>Peer behavioural problems</td>
<td>10</td>
<td>1.96</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Conduct behavioural problems</td>
<td>8</td>
<td>2.16</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Prosocial behavioural problems</td>
<td>9</td>
<td>2.42</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td>Hyperactive behavioural problems</td>
<td>9</td>
<td>2.33</td>
<td>.31</td>
</tr>
</tbody>
</table>

Respondents responded on a 3-point Likert scale with 1 = False, 3 = True

Several respondents rated prosocial behavioural problems as the most experienced problem \( M = 2.42, SD = .42 \). for learners with hyperactive behavioural problems \( M = 2.33, SD = .31 \) and conduct behavioural problems \( M = 2.16, SD = .16 \). The majority rated peer behavioural problems \( M = 1.96, SD = .26 \) as the least experienced problem. Similar results were revealed for emotional behavioural problems \( M = 1.98, SD = .41 \).

4.7. Summary of Main Findings

As outlined in this thesis, the findings that are discussed are in line with the aims and objectives of the study. This section provides more insight into the roles that parents/primary caregivers and teachers play in the psychosocial health and well-being of learners in ECD at primary schools. Literature suggest that psychosocial health and well-being in ECD is very important, as it will allows children to grow to optimal development over their entire lifespan.

This study revealed the parents/primary caregivers’ opinions that their children mostly experienced school and social functioning problems in ECD at schools. Additionally, in this current study, the opinions of the parents/primary caregivers are similar to those of the teachers, who indicate that children mostly experience prosocial behavioural problems in ECD. The findings of this current study is similar to those of a study conducted by Barbarin,
Bryant, McCandies, Burchinal, Early, Clifford, Pianta and Howes (2006) who assert that the role of parents is important for the effective monitoring of their child’s growth and progress, when they (parents) are living in a supportive and satisfying dyadic relationship. The findings of this current study also concurs with those of a study conducted by Ståhl (2012) which reveal that environmental and personal factors belong to the complex context of a child’s life and as such, affect the child’s ability to function optimally. Several other studies reveal that, when children grow up with inadequate resources, such as those living in poverty, lower levels of intellectual functioning and higher levels of emotional and behavioural impairments are apparent (Grantham-McGregor, 2007; Wachs, 2000; Heckman, 2006, pp. 1-30; Day & Gray, 2008, pp. 369-506). Studies contend that the more chronic and persistent the experiences of disadvantage in the early phases, the more adverse the effects on the development of children (Barbarin et al., 2006; Aboud, 2007, pp. 3-13; Albers & Grieve, 2007, pp. 180-190; Bradley & Corwyn, 2005, pp. 468-478).

The results of this current study further suggest that teachers may also perceive children to be experiencing conduct and hyperactive behavioural problems in ECD. Additionally, the results also suggest that both parents and teachers may perceive children to be experiencing emotional problems in ECD. A study conducted by Berg (2011) reveals that, when children manage and display their emotions successfully, it indicates that they are emotionally competent, meaning that they are able to use their emotions to send and receive messages that are important in social interactions. Burkhardt (2014) suggests that, when children cannot effectively regulate their emotions, they tend to have difficulties with social interactions. Besides, it has been established that the ability to regulate emotions in early childhood predicts empathy and prosocial behaviour.

Shepard and Dickstein (2009) add that poor parent-child relationships and parent-family management practices may unintentionally reinforce early disruptive behaviour, in the context of child behaviour. A study conducted by Cummins and McMaster (2006) reveals that children and adolescents comprise approximately a fifth of the population that may be suffering from psychological problems at any given time. Literature indicate that the spectrum of behaviours could range from very mild to clinically problematic, with behavioural problems probably being the manifestation of deeper emotional/mental health
problems (Cooper, Hooper & Thompson, 2005). Additionally, studies reveal that emotional disorders (for example depression, anxiety and obsessions), hyperactivity (for example inattention and over activity) and conduct disorders (for example troublesome, aggressive and antisocial behaviour) are the three most common groups of mental health problems in childhood (Cole, Luby & Sullivan, 2008; Cooper, Hooper & Thompson, 2005; Nijboer, 2007). A recent study conducted by Mackintosh, Myers and Kennon (2006, pp. 581-596) indicates that, when children experience positive feelings about themselves, this experience is related to the relationship that they have with their parents/primary caregiver. The quality of parent-child relationships influences the child’s ability to develop a wide range of competencies during the preschool years, as well as appropriate social and emotional skills, which are important in early childhood years (Berg, 2011). This relationship lays the foundation for a child’s future development.

In Chapter 5 the methodology used for the qualitative part of phase one, stage one, of this current study is discussed in detail. The researcher adopted a participatory action research approach, with the researcher working in co-operation with the participants, in the development and research processes.
CHAPTER FIVE

FINDINGS: QUALITATIVE DATA

5.1. Introduction: Participant Information

In this chapter the current assessments and guidelines used in psychosocial health and well-being in ECD at primary schools was explored through the eight teachers’ experiences and perceptions.

Table 5.1: Demographics of participants

<table>
<thead>
<tr>
<th>Names</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Home Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandra</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Minnie</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Liz</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Lee</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Dingy</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Rene</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Aija</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
<tr>
<td>Elena</td>
<td>Female</td>
<td>C</td>
<td>Afrikaans</td>
</tr>
</tbody>
</table>

5.2. Data Analysis

The nine themes and sub-themes are presented as they emerged from the data analysis.

Table 5.2: Common themes that emerged from data analysis

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral systems for counseling and support services for learners and parents/primary caregivers.</td>
<td>Seeking emotional and physical support for parents and learners</td>
</tr>
<tr>
<td>Scholastic support for learners with medical conditions</td>
<td>Medical support</td>
</tr>
<tr>
<td>Physical and Verbal violence against learners</td>
<td>Discouragement of violence at school</td>
</tr>
</tbody>
</table>
5.2.1. Theme 1: Referral systems for counselling and support services for learners and parents/primary caregivers

This theme attempted to gather from the teachers whether the schools provided learners and parents/primary caregivers with counseling and support services. The general consensus by the teachers was that the schools had various stakeholders, who supported learners and parents/primary caregivers with counseling and support services.

5.2.1.1. Seeking emotional and physical support for parents/primary caregivers and learners

The questions were centered on the teachers’ personal and individual experiences with learners at school and their interaction with the parents/primary caregivers of the learners. The participants, however, did not identify any support systems for children with special needs. They were asked, “Does the school provide counselling and support services to parents and children?” The answers that they disclosed were more of their general encounters with the learners at school. The following statements refer:

“Yes, we have various stakeholders that provide support to learners and parents, e.g. school psychologist, speech therapist, safe schools” (Rene)

“Yes, there are structures in place as well as policies that have to be implemented to allow parents and children to come and relief them from their problems via counseling” (Aija)
“yes, psychologist and social worker from the circuit can help when available” (Lee)

5.2.2. Theme 2: Scholastic support for learners with medical conditions

The focus of this theme was to determine whether children, who experienced medical conditions at school, received support from the teachers at school, as perceived by the participants. Although teachers were not allowed to administer any medication to learners, they explained that there were teachers at the schools, who were trained in First Aid, should a learner require medical attention.

5.2.2.1. Medical support

It was evident that teachers were very passionate about supporting learners with medical conditions and stated that, in the event of an emergency, the parents/primary caregivers of these learners were contacted immediately. When teachers were unable to contact the parents, the employers of the parents would be contacted. The question, “Does the school provide support for children with medical conditions?” was put to the participants, who responded as follows:

“We are not supposed to give any medicine no pills to children”
(Minnie)

Yes, there are few teachers which have first aid, who can assess children. Parents are contact to take their children to the doctor”
(Liz)

5.2.3. Theme 3: Physical and Verbal violence against learners

The participants indicated that it was important for them to abide by the policies and laws concerning physical and verbal violence against learners. They also mentioned that, as they were bound by policies, they make use of the Representative Council for Students to address any behavioural problems of the learners.

5.2.3.1. Discouragement of violence at school

The importance of abiding by the laws and policies is clearly indicated by the following statements by the participants:
“Yes, at our school we have a group, Soul Buddy’s and they inform all the learners at our schools about violence and that danger about it, and during assembly they perform the danger of it” (Dingy)

“Yes, we have campaign from our Representative Council for Students (RCS), who would inform learners of certain campaigns, such as Violence and abuse (rape) against women and children, Aids day, etc. peer educators are also actively involve” (Rene)

“Yes. There are often times when we make use of the local police and nurses to come and encourage children to speak out against violence towards them” (Aija)

5.2.4. Theme 4: Structures in place to support learners with medical conditions

An understanding of the support structures that were in place at the schools to care for children with medical conditions was sought by this theme.

5.2.4.1. Medical care and support at school

The question posed was, “Is there a structure at school to deal with children with medical conditions?”. The following answers were expressed by the participants:

“Yes. First aid teachers and children use the sickbay at school” (Sandra)

“Teachers with First Aid help the children. The parents are phoned or an ambulance for children with severe medical conditions” (Lee)

“We have open communication network with local paramedics. We also have a school doctor that the school make use of in case of any emergency” (Rene)

5.2.5. Theme 5: Referral systems and support for learners in case of emergencies at schools

The participants were ask whether the schools had contingency plans, in case of any emergencies and whether they were familiar with such plans. The participants provided clear guidelines on what to do should in an emergency situation.
5.2.5.1. Various referral support systems and contingency plans

The question, “Do parents of learners know where their children are referred to in case of any emergency that might occur at school?”, pertaining to support for learners in case of emergencies, was posed to the participants. The following extracts indicate the participants’ responses:

“Yes. Secretary informs parents’ (Sandra)“

“Yes. School has all phone numbers of the parents at school or the phone numbers of the farm owners” (Minnie)

“Yes. Parents are informed by the secretary and the teacher must assist the learner until the parent arrives” (Liz)

5.2.6. Theme 6: Support for children to adapt at schools

Not all children are able to adapt easily to a new environment. The participants were asked whether the schools had any support systems for learners to function socially.

5.2.6.1. Social functioning

The following question was posed, “Do children seem to be rather lonely at school?” The participants indicated that the children do not have any difficulties forming peer relationships, as indicated by the following statements:

“No, their friends at school are their friends at home” (Sandra)

“No, they happy because if they hungry there is food for the hungry kids-feeding scheme” (Minnie)

“No, they make friends easily play well in groups with their peere and they are open with their teachers” (Rene)

5.2.7. Theme 7: Support for children who are bullied at school

Numerous studies reveal that children are affected by bullying. The participants were asked whether the schools had preventative measures in place to guard children from becoming victims of bullying. The participants confirmed that bullying does occur at the schools, especially in places where there are no supervision, such as the toilets. However, they stated that the learners were well aware of the consequences bullying.
5.2.7.1. Preventative measures

The following question was asked concerning the occurrence of bullying at the schools. “Do children often get bullied by other children?” Although there are preventative measures in place for learners, the participants indicated that the learners were well informed about how to report such incidences and indicated as follows:

“Yes, learners are informed that if they are bullied they must report it immediately” (Liz)

“Yes, but the teachers make the learners ware; if anyone is bullying them they must report it immediately” (Dingy)

“Sometimes children are bullied by the older ones at school. Specially in the toilets where there are often no supervision and because the school are a primary and secondary school combined” (Aija)

5.2.8. Theme 8: Policies and programmes for children being bullied at school

Besides the urgent need of support for learners affected by bullying at school, the teachers indicated that there were policies and programmes at the school, which protect learners, as well as teachers, on how to deal with bullies at school.

5.2.8.1. Seeking advice

Participants responded to the question, “Does the school have any policies and programmes in place to prevent children from being bullied at school?” in the following way:

“Yes, the school has a policy for learners with bad behaviour” (Liz)

“Yes, we as teachers have programs we integrated in our classrooms, to bring about awareness of bullying, how it is a negative impact on learners life and what a bully can learn just from being helpful, and respectful toward his/her peers” (Rene)
5.2.9. Theme 9: Policies concerning harsh punishments available at schools

Although the government has implemented policies to protect learners from punishment at schools, it is evident from the responses of the participants, that harsh punishment of learners is still occurring at schools. The aim of this question was to explore whether the schools had any policies concerning the punishability of learners, as well as to determine whether the participants were aware of the consequences, when a learner must be punished.

5.2.9.1. Perceptions concerning corporal punishment

Most of the participants indicated that the schools have policies that inform teachers about any form of punishment of learners. The following question “Does the school actively discourage harsh punishment against learners?” was posed to the participants, followed by their statements:

“Yes, teachers are actively encourage not to use corporal punishment” (Liz)

“Yes, we punish learners in a learningful manner” (Dingy)

“Yes, we intend to punish learners in a more learningful manner where learners can take punishment and turn it into positive learning where their peers also learn. Through this we do not want to discourage learners, we want to uplift them” (Rene)

5.3. Summary of the main findings

The Constitution of the Republic of South Africa (1996), chapter two, states that every child has the right to an education and every child has the right to be safe. It is, therefore, a fundamental basic human right for all children from different socio-economic backgrounds, within a democratic society, to feel safe and secure in their environment. A school plays a pivotal role and is responsible for the creation of a secure and safe environment for children in their care, assuring parents/primary caregivers that their children will be protected from harm. However, although children spend most of their childhood at school, they are not freed from the different barriers that could hinder their development. These barriers include aspects of social, emotional and physical functioning, violence, medical conditions, bullying, and
corporal punishment.

The main findings of this study, as informed by the teachers, show that learners and their parents/primary caregivers are supported in ways that meet the needs of the learners. The participants illustrated, through their responses, that schools provide learners and their parents/primary caregivers with counselling and support services, made available through the different policies and structures available at school. The type of support needed by learners, is determined and stipulated in the Screening, Identification, Assessment and Support (SIAS) (SA DoBE, 2014, p. 8 [11a,b,c]). In addition, this policy is structured in a way that makes it easy for educators and schools to understand the support needed for all learners in a non-discriminating way, which further enhances the delivery of the National Curriculum and Assessment Policy Statement (South Africa, Department of Education [DoE], 2011).

Although teachers are not allowed to dispense any medication to learners, the participants indicated that the school had educators, who were trained in First Aid to assess, assist and support these learners, should they require any medical assistance. The educators, therefore, support learners, as stipulated in SIAS (SA DoBE, 2014, p. 8 [11a,b,c]), which states that, in order for a learner to receive any support, the School-Based Support Team (SBST) should send a request to the District-based Support Team (DBST) for learners in need of assessment (for example, medical, social, psychological and therapeutic – occupational therapy, speech therapy and physiotherapy). Additionally, it is expected that the SBST assessing the learner specify the nature of the assessment, as well as the motivation for such an assessment.

The participants expressed their concerns about the physical and verbal violence against learners at school and highlighted that it was important for teachers to abide by the rules and policies regarding any form of violence at school. However, although teachers are bound by these policies, a study conducted by Mncube and Harber (2013) reveals that high levels of violence (for example, physical and sexual abuse, as well as gang-related activities) in South African schools is a plague that is a cause for concern, as reported daily in the written and electronic media. In addition, when learners are faced with violence in schools, it negatively impacts on the education and academic achievement, not only in the early phase of development, but also at higher learning institutions. Depending on the nature of the violence
against learners, it can impact on the psychosocial health and well-being of learners in general. Any violence that learners experience will also have an impact on the parents/primary caregivers, who will question whether schools are really safe havens for their children. Support for learners at schools is, therefore, very important for development across all spheres of their lives. The participants confirmed that there were different support structures at schools that serve as buffers against any kind of violent behaviour on learners, teachers and the school property. The participants further identified various support systems that were accessible to learners, such as the Representative Council for Students. Although violence affects schools, several studies indicate that violence is also perpetuated or perpetrated by schools, as violence in schools emanate from different sources, can take on many forms and involve different actors (Harber 2004; Pinheiro 2006; PLAN 2008; Smith & Vaux, 2003). A report by the South African Institute of Race Relations (SAIRR) (2008) states that only 23% of South African learners commented that they felt safe at school (Mncube & Harber, 2013).

According to the participants, children do not have difficulties in forming social relationships with their peers because most of the learners at school come from the farming community and are usually very close to one another, as their friends at home, are their friends at school. However, a study conducted by Hirst, Jervis, Visagie, Sojo and Cavanagh (2011) indicate that the development and growth of children can be harmed, when their environment does not support their psychosocial health and well-being, for example, children may not have sufficient food; they may live in overcrowded and poor housing conditions, they may be prone to illness or living in single parent households.

The participants indicated that the schools provided all children with food daily because learners have access to the Kids Feeding Scheme which was made available to schools by government (Rendall-Mkosi, Wenhold & Sibanda, 2013). The National School Nutrition Programme (NSNP) was launched in 1994 as the first post-apartheid initiative by the South African government. The goal of the NSNP is to provide learners with school meals in poor socio-economic areas, and also to relieve the burden of concern for poor parents/primary caregivers, who are unable to provide their children with enough food. Research indicates that approximately 20% of households in South Africa experience food insecurity (Rendall-
A study conducted by Hirst et al. (2011) assert that schools play an integral role of supporting children and their families to adjust to the social and emotional demands of children at school. Their study also revealed that children exhibit adjustment difficulties in the early phases, such as pretending to be sick, or reluctance to go to school. However, children, who experience psychosocial health and well-being at school, enjoy better learning ability, form stronger relationships with their peers, and their family members and educators are, therefore, better equipped to meet the challenges that they experienced daily.

Recent studies conducted by Sullivan (2006) and De Wet (2006, pp. 61-73) indicate that primary school learners come into contact with bullies every day and that bullying is escalating in schools. The participants explained that schools have preventative measures in place for learner-victimsof bullying. The schools also have policies and programmes in place to prevent learners from becoming victims of bullying. Research conducted, between 2003 and 2005, on bullying in developing countries, revealed that between one fifth and two thirds of children reported that they were bullied in the preceding 30 days (Mncube & Harber, 2013). The same research also revealed that almost a quarter of the seven million learners who were questioned in Spain, and a third of those surveyed in Australia, reported that learners were being bullied by classmates (Mncube & Harber, 2013).

The participants for this study indicated further that they constantly reminded learners to report incidences of bullying immediately. In addition, the findings of this study revealed that participants were also aware of the negative impact that bullying had on the development of learners. Although there were different types of bullying, such as physical bullying (kicking or shoving), verbal bullying (name calling, insulting, swearing), emotional bullying (threatening, humiliating), sexual bullying (touching, forcing unwelcome affection, harassing), relationship bullying (excluding victim from the group), and cyber bullying (sms, email, mxit), some might be more subversive than others, and not easy to pinpoint (Smith, 2005).

Although participants suggested that there were measures in place at schools to prevent
learners from being bullied, Smith (2005) states that the incidences of bullying has not declined, despite many years of research and intervention, and further claims that both the school organisation and culture can be conducive to bullying. Mncube and Harber (2013) are of the opinion that a child, who comes from a home where physical punishment does not occur, is often exposed to physical punishment for the first time in school, as corporal punishment is still widely practised in the rural areas of South Africa (Nelson Mandela Foundation, 2005, p. 17). The United Nations Committee on the Rights of the Child (2006), adopted General Comment No.8, which stipulates that a child has the right to be protected from corporal punishment and other cruel, or degrading forms of punishment. Although the participants were aware that the use of corporal punishment against learners in South African schools is prohibited, this study revealed that corporal punishment was still practised as a form of discipline on learners (PLAN, 2008, p. 12). A study conducted by PLAN (2008) highlights that there is no evidence that corporal punishment improves behaviour, or academic achievement, and contributes to the school dropout rate (Teeka-Bhattarai, 2006). Additionally, there is a body of evidence about the harmful effects of corporal punishment that includes physical harm, increased anxiety, fear or resentment in class, in certain instances, even death (Humphreys, 2006). Educators, therefore, are guided by the Code of Professional Ethics of the South African Council for Educators, which concurs with the South African Schools Act (No 84 of 1996) and the Constitution of the Republic of South Africa (1996), which prohibits corporal punishment as a form of discipline at schools.

5.4. Conclusion

This part of the current study sought to explore and describe the perceived support systems for learners in the rural areas. The research objective for was to examine the current health promotion practices in ECD at primary schools in the rural areas. The findings of this study revealed that, although there are numerous support systems available, the efficacy of these support systems can be questioned.

In the following chapter, Chapter Six, the systematic review that was conducted to identify literature pertaining to instruments that were previously used to assess psychosocial health and well-being in ECD at primary schools, is discussed.
CHAPTER SIX

RESULTS: SYSTEMATIC REVIEW

6.1. Introduction

Psychosocial health and well-being is crucial during early childhood development, from birth through to nine years of age (SA DoE, 1995a; SA DoE, 1996). The experiences of children in the early phases of their lives lay the foundation for happy and purposeful lives. Psychosocial health and well-being is best described in the definition of health established by the World Health Organisation (WHO, 1948, p. 100) as a “state of complete physical, mental and social well-being and not merely the absence of disease and infirmity”.

UNICEF (2001, p. 1) refers to early childhood development (ECD) as a comprehensive approach to policies and programmes for children from birth to eight years of age and to their parents/primary caregivers. The purpose of this approach is to defend the right of children to develop to their full cognitive, emotional, social and physical potential, with a special focus on health, nutrition, education, water, environmental sanitation in homes and the community. This approach, therefore, promotes and defends the rights of each child to survive, grow and develop from childhood to adulthood. ECD, therefore, is characterized by rapid growth and development, which can either enhance, or hinder, optimal development and learning abilities across the lifespan of children (Biersteker, 2010).

According to Haq (2013) a child’s physical and social environment is critical for the child’s growth and development. He adds that measuring the developmental opportunities available in a child’s environment, is crucial to screen children in need, as well as to assess the effectiveness of ECD interventions that aim to improve a child’s environment. Additionally, according to Irwinet al. (2007), ECD interventions aim to promote child health at the family, household and community levels, so that the chances of becoming healthy, intelligent and, ultimately, growing into a productive individual are maximized. Various studies indicate that healthy early child development, includes physical, social-emotional, and linguistic/cognitive development, and is fundamental to success and happiness, not only during childhood, but
Monitoring psychosocial health and well-being of children has become a growing interest among researchers, educators, policymakers and child service agencies at a population-level (Ben-Arieh et al., 2008; Brown, 2008). Schonert-Reichl et al. (2013) assert that population-level indicators of the health and well-being of children can serve as a measure to inform programmes, practices and policies, which aim to optimize the positive development of children and prevent educational and psychological difficulties. Although there are existing international guidelines, policies and programmes on health promotion in ECD, studies indicate that there is a need for valid and reliable instruments to assess the well-being of children over a range of domains (Schonert-Reichl et al., 2012). These instruments serve to be a concomitant factor for psychosocial health and well-being of children (Schonert-Reichl et al., 2012).

The primary aim of this current study was to develop a School Health Index Score Card that is a reliable and valid instrument, with the aid of teachers, parents/primary caregivers, nurses, and experts in ECD as informants. This instrument will allow teachers and other professionals in ECD to measure, monitor and report on the psychosocial health and well-being of children in ECD at primary schools. This approach is aligned with the UNCRC (1989, articles 9, 18, 20 and 21) concerning the best interest of the child, particularly focusing on early childhood development. The principle of best interest applies not only to the protective measures of children concerning their right to survival, growth and well-being, but it also serves as a measure to support parents/primary caregivers and those responsible, on a daily basis, to realise the rights of a child. The SHISC enables all ECD stakeholders to obtain relevant data on children in ECD at primary schools in 7 dimensions, (1) education providing psychosocial support, (2) systems/services, (3) safety and protection, (4) nutritional support, (5) infrastructure, water and sanitation, (6) material support, and (7) co-curricular support.

Due to limited information on valid and reliable instruments that assess psychosocial health and well-being in early childhood, a systematic review to evaluate existing instruments was conducted. This review is a Phase 1, stage 2 of the broader study to create a School Health Index Score Card. The research question that guided this stage of the study was, “How is psychosocial health and well-being currently assessed in Early Childhood Development in
The subsequent objective of the study was to systematically review previous studies that use instruments to assess psychosocial health and well-being in ECD at primary schools.

### 6.2. Methodology

A systematic review is “a review that strives to comprehensively identify, appraise, and synthesize all the relevant studies on a given topic” (Petticrew & Roberts, 2006). Kitchenham and Charters (2007) aver that a systematic review provides a comprehensive and systematic evaluation of research, using a predefined search strategy to minimize bias. It is explicit and precise, aiming toward minimizing bias, consequently enhancing the reliability of the results obtained in response to a research question (Cochrane Collaboration, 2013; Clarke, 2011). When the term *review* is used in this chapter, it means, *systematic review*. The studies for this review were selected according to population (children in early childhood), intervention (instruments that focus on psychosocial health and well-being of learners in ECD at primary schools), comparison (not applicable in this study), and the outcomes (relating to whether there are reliable and valid instruments that assess psychosocial health and well-being of children) of this study.

#### 6.2.1. Inclusion Criteria

The inclusion criteria for studies considered for this review were:

- Articles had to be published in, or translated into, the English language
- Time period: January 2004- December 2014 (considering literature that was published within the ten year period, giving an overview of the current findings of the study);
- Studies had to involved children as part of the sample;
- Studies had to look at instruments used to measure psychosocial health and well-being of learners in early childhood development; and
- studies that covered both national and international literature.

#### 6.2.2. Exclusion Criteria

The exclusion criteria for studies excluded for this review were:
• studies not published in, or translated into, the English language
• studies not published within the prescribed time period; and
• studies that did not meet the criteria needed to answer the research question.

6.2.3. Search Criteria and Strategy

Data were systematically collected from electronic databases, such as, Science Direct, Pubmed, MEDLINE, COCHRANE, PsychArticles, ERIC, EMBASE, CINAHL and BioMed Central, through the University of the Western Cape library, as well as journals. A pre-determined search was conducted with terms on the topic of interest, such as, psychosocial health, well-being, early childhood development, parent-child-interaction, school health index score card, tool, questionnaire, checklist, measure, assessment, instrument, scale and test, to minimize the potential for selection bias. The terms and definitions shown in Table 6.1 were considered before the commencement of this review.

Table 6.2: Terms and Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychosocial health</td>
<td>World Health Organization defines psychosocial health as “a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity”.</td>
</tr>
<tr>
<td>Well-being</td>
<td>“Well-being generally includes global judgements of life satisfaction and feelings ranging from depression to joy” (Diener, Scollon &amp; Lucas, 2009, 69-100). Well-being also includes the “presence of positive emotions and moods (e.g. contentment, happiness), the absence of negative emotions (e.g. depression, anxiety), satisfaction with life, fulfilment and positive functioning” (Frey &amp; Stutzer, 2002; Diener, 2000; Ryff &amp; Keyes, 1995; Andrews &amp; Withey, 1976).</td>
</tr>
<tr>
<td>Early childhood development</td>
<td>“an umbrella term that applies to the processes by which children from birth to at least nine years grow and thrive, physically, mentally, emotionally, spiritually, morally and socially” (SA DoE, 1995; SA DoE, 1996).</td>
</tr>
</tbody>
</table>

6.3. Method of the review

Titles and abstracts were reviewed and examined by the primary researcher from the results obtained, using the inclusion criteria. Full text articles were retrieved by another reviewer, who followed the same process to determine whether the article met the inclusion criteria for
the review (Davids & Roman, 2014). Duplicates were removed, with the remaining sample consisting of 12 articles that met the inclusion criteria. The articles retrieved were assessed by the primary researcher for methodological quality by using a critical appraisal tool.

6.4. Methodological quality appraisal

For studies to be assessed for their methodological quality, an instrument that was adapted from previous studies by Davids and Roman (2014), Ryan, Roman and Okwany (2015), Roman and Frantz (2013) and Munn, Moola, Riitano and Lisy, (2014), illustrated in Table 6.2, was used. The methodological quality of articles was assessed on their sampling methods, research question, recruitment of the sample, description, setting, source of data, documented response rate, reliability and validity of measuring tools used and statistical analysis. Only twelve articles were found to meet the inclusion criteria of the review (see Table 6.3). Figure 6.1 serves as an illustration of the inclusion process of the review.

Table 6.2: Methodological Quality Appraisal Tool

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes =1</th>
<th>No =0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was the sampling method representative of the target population intended to the study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Was the research question established before conducting the study?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Were study participants recruited in an appropriate way? (permission from relevant authorities to conduct the study, ethical consideration, informed consent from participants).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Were the study subjects described in detail?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Were the study setting described in detail?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Did the study report any response rate? (if the reported response rate is less than 60%, the question should be answered “no”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Was non – response addressed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Was the measurement tool used valid?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Was the measurement tool used reliable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Was there appropriate statistical analysis?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scoring: Total score divided by total number of items multiplied by 100

<table>
<thead>
<tr>
<th>Methodological Appraisal Score</th>
<th>Bad</th>
<th>Satisfactory</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6.3: Methodological Appraisal

<table>
<thead>
<tr>
<th>Author (s)</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>100%</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zijlstra et al. (2013)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>80</td>
<td>67-100</td>
</tr>
<tr>
<td>Jianduan (2009)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Najman et al. (2008)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Allgaier et al. (2014)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>80</td>
<td>67-100</td>
</tr>
<tr>
<td>Machnes-Maayan et al. (2014)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Betts, Rotenberg &amp; Trueman (2009)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>67-100</td>
</tr>
<tr>
<td>Mensah et al. (2013)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Troop-Gordon &amp; Gerardy (2012)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Bouffard, Vezzau &amp; Lengelé (2011)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Bulotsky-Shearer, Fernandez &amp; Rainelli (2013)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Karabekiroglu et al. (2014)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
<tr>
<td>Honkanen et al. (2014)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90</td>
<td>67-100</td>
</tr>
</tbody>
</table>

6.5. Data extraction

A data extraction table was created after the methodological quality appraisal of the studies that met the inclusion criteria. The studies that met the categories of ‘good to satisfactory’ were reviewed by the supervisor and co-supervisor of the research, guided by the data extraction tool developed by Roman and Frantz (2013). The data extraction table was created to identify geographical location of the study, author, participants, study design, instrument, description of instruments used to assess psychosocial health and well-being, domain/subscales of instruments, reliability and validity of instruments and psychosocial indicators (see Table 6.4.)

6.6. Results

The focus for this review was on instruments that assess psychosocial health and well-being of children in ECD. The age groups of the participants were from zero months to twenty
years of age, as most articles reviewed, used instruments that assessed psychosocial health and well-being over the entire lifespan of the child. Of the 21 articles reviewed for instruments that use psychosocial health and well-being indicators, only twelve articles as

**Figure 6.1. Inclusion process of the review**
appraised, reached the desired outcome within the good category that falls in the 67-100% bracket.

Table 6.4: Instruments that assess psychosocial health and well-being

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Study Design &amp; Location</th>
<th>Description</th>
<th>Psychosocial Indicators/Domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Best Interest of the Child Questionnaire (Zijlstra et al., 2013) &amp;</td>
<td>Cross-sectional The Netherlands</td>
<td>Developed to measure quality of childrearing environments and conditions in society. Effective instruments for estimating internalizing and externalizing behavioural problems in children.</td>
<td>Depression; anxiety; social anxiety; hyperactive/inattention; aggression; peer aggression; antisocial/prosocial behaviour; social skills</td>
</tr>
<tr>
<td>The Social and Pedagogical situation Questionnaire (VSPS)(Zijlstra et al., 2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese Infant Toddler Social and Emotional Assessment (CITSEA) (Jianduan et al., 2009)</td>
<td>Cross-sectional China</td>
<td>Designed to assess socio-emotional problems, including delays in socio-emotional competencies (e.g., externalizing, internalizing and dysregulation competencies) for young Chinese children.</td>
<td></td>
</tr>
<tr>
<td>Child Behavioural Checklist 2/3 (CBCL2/3) (Jianduan et al., 2009) &amp;</td>
<td></td>
<td>Designed to assess internalizing and externalizing behavioural problems for children. A measure developed for parents to report on child temperament</td>
<td>Activity level; rhythmicity; approach-withdrawal; adaptability; intensity to reaction; quality of mood; persistence; distractibility</td>
</tr>
<tr>
<td>China Toddler Temperament Scale (CTTS)(Jianduan et al., 2008)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Behaviour Checklist (CBCL) (Najman et al., 2008)</td>
<td>Longitudinal Brisbane; Australia</td>
<td>Developed to measure internalizing and externalizing problems of children.</td>
<td>Depression; anxious; social anxious; aggression; peer aggressiveness; antisocial/prosocial behaviour; attention emotional symptoms; delinquent problems; social problems, though and attention problems</td>
</tr>
<tr>
<td>Test</td>
<td>Study Design</td>
<td>Location</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Children’s Depression Screener (ChilD-S) (Allgaier et al., 2014)</td>
<td>Cross-sectional</td>
<td>Munich, Germany</td>
<td>Standardized measure documenting common disorders in children</td>
</tr>
<tr>
<td>Strengths and Difficulties Questionnaire (Machnes-Maayan et al., 2014) &amp; The Development and Well-Being Assessment Questionnaire (DAWA) (Machnes-Maayan et al., 2014)</td>
<td>Cross-sectional</td>
<td>Israel</td>
<td>Developed to detect behavioural problems in children and adolescents</td>
</tr>
<tr>
<td>Early Childhood Generalized Trust Belief Scale (ECGTBS) (Betts et al., 2009)</td>
<td>Longitudinal</td>
<td>United Kingdom</td>
<td>Developed to assess generalized trust in relationships between children and their mother, father, teachers and peers.</td>
</tr>
<tr>
<td>Strengths and Difficulties Questionnaire (Mensah et al., 2013) &amp; Pediatric Quality of Life Inventory (Mensah et al., 2013)</td>
<td>Longitudinal/ Cohort</td>
<td>Melbourne, Australia</td>
<td>Developed to detect behavioural problems in children and adolescents. Generic quality of life instrument to assess psychosocial aspects of health and well-being.</td>
</tr>
<tr>
<td>Children’s Social Behaviour Questionnaire (CSBQ) (Troop-Gordon et al., 2012)</td>
<td>Longitudinal</td>
<td>United States of America</td>
<td>Developed to assess parent’s beliefs regarding children’s peer victimization</td>
</tr>
<tr>
<td>Test Name</td>
<td>Longitudinal Location</td>
<td>Data Collection Method</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mental Ability Test (Bouffard et al., 2011)</td>
<td>Longitudinal</td>
<td>A standardized test developed to measure the pupils’ cognitive abilities in schools</td>
<td>Perceived scholastic competence and social comparison mechanisms</td>
</tr>
<tr>
<td>The Devereux Early Childhood Assessment (DECA)(Bulotsky-Shearer, Fernandez &amp; Rainelli, 2013)</td>
<td>Cross-sectional</td>
<td>Standardize rating scale developed to assess a comprehensive set of resilient socio-emotional protective factors and behavioural concerns of children</td>
<td>Attention; emotional symptoms; adaptive; prosocial and resilient behaviour; problematic behaviour (e.g. destroys or damages property, difficulty concentrating, easily upset, temper tantrums)</td>
</tr>
<tr>
<td>Socio-Demographic and Psychiatric Assessment Form (Karabekiroglu et al., 2014) &amp; The Brief Infant – Toddler Social and Emotional Assessment (BITSEA)(Karabekiroglu et al., 2014)</td>
<td>Cross-sectional</td>
<td>Designed to collect socio-demographic data on the epidemiology of risk and protection amongst children</td>
<td>Socio-demographic features of the parents and family; developmental features, medical and psychiatric history of the child; possible stress factors that might affect psychosocial development of the child; general health status of the child; psychosocial education and social support resources of the mother and/or primary caregiver</td>
</tr>
<tr>
<td>Rutter Children’s Behavioral Questionnaires (Honkanen et al., 2014)</td>
<td>Longitudinal</td>
<td>Designed to assess student’s emotional and behavioural problems</td>
<td>Emotional/neurotic; behavioural/antisocial; hyperactivity/inattention; delinquent behaviour</td>
</tr>
</tbody>
</table>

### 6.7. Overview of reviewed studies

The final sample for this study consisted of twelve articles that were published from 2004 to 2014. Six studies were cross-sectional (Zijlstra et al., 2012; Jianduan et al., 2009; Allgaier et al., 2014; Machnes-Maayan et al., 2014; Bulotsky-Shearer, Fernandez & Rainelli, 2013; Karabekiroglu et al., 2014) and six were longitudinal studies (Betts, Rotenberg & Trueman,
2012; Troop-Gordon & Gerardy, 2012; Bouffard, Vezeau & Lengele, 2011; Najman et al., 2008; Mensah et al., 2013; Honkanen et al., 2014). The majority (three) of the studies were conducted in the United States (Troop-Gordon & Gerardy, 2012; Bouffard, Venezeau & Lengelè, 2011; Bulotsky-Shearer, Fernandez & Rainelli, 2013), two in Australia (Najman et al., 2008; Mensah et al., 2013), and one study each in The Netherlands (Zijlstra et al., 2013), China (Jianduan et al., 2009), United Kingdom (Betts, Rotenberg & Trueman, 2009), Germany (Allgaier et al., 2014), Israel (Machnes-Maayan et al., 2014), Turkey (Karabekiroglu et al., 2014) and Finland (Honkanen et al., 2014) respectively. The participants included in the cross-sectional studies ranged from birth (0 months) to 21 years of age. The longitudinal studies included children from birth to twenty one years of age, with follow-up periods at the age of 4-5 years; 6-7 years; 8-9 years; 10-11 years; 14 and 21 years old.

6.8. Outcome measure

Of the studies included, as presented in Table 4.4, two of the studies used the Strengths and Difficulties Questionnaire to report on behavioral difficulties of children (Machness-Maayan et al., 2014; Mensah et al., 2013), two studies used the Child Behavior Checklist 2/3 (CBCL 2/3), which is an instrument used to evaluate the social-emotional and behaviour problems, as well as competency of children in early childhood (Jianduan et al., 2009; Najman et al., 2008), and two studies used the Brief Infant-Toddler Social and Emotional Assessment (BITSEA), an instrument developed by Carter, Briggs-Gowan & Davis (2004) that assesses social-emotional/behavioural problems and/or socio-emotional developmental delay in early childhood (Karabekiroglu et al., 2014; Jianduan et al., 2009). The Brief Infant-Toddler Social and Emotional Assessment used by Jianduan et al. (2009) for their study was translated into the Chinese version (CITSEA) because the direct use of the BITSEA might not have been culture sensitive. The translated instrument demonstrated good internal consistency with the Cronbach Alpha coefficient that ranged from 0.79 to 0.88, and test-retest reliability that ranged from 0.78 to 0.89 (M = 0.83) at the significant level p < 0.001. The CITSEA was used to assess socio-emotional development of children from the age of 12 to 36 months (Jianduan et al., 2009).

Depression, anxiety, social anxiety, hyperactivity, aggressiveness and anti-social behaviour
were all measured using the Social and Pedagogical Situation Questionnaire (Zijlstra et al., 2013). Other instruments used were, the China Toddler Temperament Scale that assesses children’s socio-emotional problems (Jianduan et al., 2009); the Children’s Depression Screener that assesses childhood depression and somatic disorders (Allgaier et al., 2014); the Development and Well-being Assessment Questionnaire that assesses psychiatric comorbidity in children with recurrent headaches, or recurrent abdominal pain (Machness-Maayan et al., 2014); the Early Childhood Generalized Trust Belief Scale that assesses generalized trust (Betts, Rotenberg & Trueman, 2012); the Mental Ability Test that assesses children’s self-perceived competence in schools (Bouffard, Venezeau & Lengelè, 2011); the Devereux Early Childhood tool that performs a socio-emotional assessment (Bulotsky-Shearer, Fernandez & Rainelli, 2013); the Socio-Demographic and Psychiatric Assessment Form that assesses socio-demographic features of the parents and family, developmental features, medical and psychiatric history of the child, possible stress factors that might affect psychosocial development of the child, general health status of the family and pregnancy, labour history, psychosocial education and social support resources of the mother and/or primary caregiver and the Brief Symptom Inventory that measures anxiety, depression, negative self, somatization and hostility (Karabekiroglu et al., 2014), as well as the Rutter Children’s Behavioural Questionnaire used for the teacher’s assessment of children with emotional or behavioural problems (Honkanen et al., 2014).

6.9. Overview of reviewed studies

While it is beyond the scope of this systematic review to provide a comprehensive evaluation of all the assessment tools for child development, this review provides an in-depth examination of instruments that are most pertinent to the psychosocial health and well-being of children in ECD. These instruments provide a comprehensive assessment of the psychosocial health and well-being of children across their life span. The instruments, described in detail below, are those that best assess the child in a multiple context.

6.9.1. Chinese version of the Urban Infant-Toddler Social and Emotional Assessment (CITSEA)

According to studies conducted by Jianduan et al., (2009), the Chinese version of the Urban Infant-Toddler Social and Emotional Assessment (CITSEA) instrument is a
comprehensive tool for social-emotional development assessment and its psychometric properties are well-recognized. The reliability and validity of the CITSEA were examined by standard psychometric methods: (1) the test-retest reliability of four broad domains ranged from 0.78 to 0.89 at the significant level $p<0.001$; (2) Split-half reliability ranged from 0.82 to 0.90 ($p<0.001$); (3) the alpha coefficient was noticed to range from 0.79 to 0.88, which demonstrated good internal consistency. The results indicate further that the score of the CITSEA domains was significantly correlated with the score for subscales of the Child behaviour Checklist 2/3 (CBCL2/3) and the dimension’s score for the China Toddler Temperament Scale. The CBCL2/3 is composed of 113 items and consists of two domains (internalizing and externalizing). China Toddler Temperament Scale (CTTS) is a measure for parents to report child temperament, contains 97 items and loads 9 dimensions (activity level, rhythmicity, approach-withdrawal, adaptability, intensity of reaction, quality of mood, persistence, distractibility, threshold of reaction). Based on the aforementioned information, the CITSEA is a suitable instrument for assessing social-emotional problems, including delays in social-emotional competence for Chinese children.

6.9.2. Devereux Early Assessment (DECA)

Studies conducted by Denham (2006) reveal that attention to promoting the social-emotional development of children has gained attention nationally. In addition, Bulotsky-Shearer et al., (2013) indicate that early childhood programmes that serve children from low-income backgrounds, such as Head Start, have the strategic opportunity to respond to the social-emotional needs of low-income children. This study indicates that equitable and timely early identification efforts are contingent upon the availability of comprehensive, reliable and valid assessment tools to determine the social-emotional strengths and needs of children. Bulotsky-Shearer et al. (2013) used the Devereux Early Assessment (DECA) for culturally and linguistically diverse children, who had been enrolled in an urban Head Start programme, to determine whether the teacher-report form of the DECA was an appropriate tool to identify the social-emotional strengths and needs of children.

The DECA is a standardized rating scale for the social-emotional adjustment of
children and has been developed to be used by teachers and parents of children, two to six years of age. Although DECA has been used in various studies, Bulotsky-Shearer et al. (2013) found that the validity for the DECA has not been well-established in independent samples of culturally and linguistically diverse, low-income preschool children. Additionally, the original standardization sample of the DECA has been found to underrepresent ethnic and linguistic minorities, as well as children from low-income backgrounds.

6.9.3. The Children’s Depression Screener (Child-S)

It is crucial to detect any mental health problems of children in ECD, as early identification will allow children to be treated, while still being allowed to prosper and develop to their fullest potential. Allgaier et al. (2014) assert that early identification and timely treatment are critical, as childhood depression has negative effects on the psychosocial functioning of children. Their studies indicate that diagnosing childhood depression can be challenging and screening tools, therefore, can help clinicians with diagnosis at an early onset.

The Children’s Depression Screener (Child-S) has not only been validated as a screening instrument for childhood depression in paediatric care, but also in mental health settings. According to Allgaier et al. (2014), the Children’s Depression Inventory Short version and the Short Mood and Feelings Questionnaire are the only two depression-specific screening instruments. However, the Children’s Depression Screener tool has only recently been developed by Allgaier et al., (2014) and has already reached a high recognition rate of 0.91 in paediatric hospitals for patients between the ages of 9-12 years of age. The Child-S was validated in a mental health care sample for the first time. The Cronbach’s Alpha was 0.81 and the item total correlations of all items were above the critical value of 0.30.

6.9.4. Best Interest of the Child Questionnaire (BIC-Q)

The Best Interest of the Child Questionnaire (BIC-Q) is an instrument used to measure the quality of the childrearing environment, which is a key term in the BIC-Q model. According to Kalverboer and Zijlstra (2006), the BIC-Q was operationalized into fourteen pedagogical environmental conditions, which underpin decisions affecting the
interest of the child as per Article 3[1] of the UN Convention on the Rights of the Child [CRC] and the child’s right to development as per Article 6[2] (UN CRC, 2006).

Additionally, the first seven conditions of the BIC-Q concern the situation of the family as follows: (1) Adequate physical care; (2) Safe direct physical environment; (3) Affective atmosphere; (4) Supportive, flexible childrearing structure; (5) Adequate examples by parents; (6) Interest; and (7) Continuity in upbringing conditions, future perspective.

Similarly, the second seven conditions refer to the conditions in society, such as: (8) Safe wider physical environment; (9) Respect; (10) Social network; (11) Education; (12) Contact with peers; (13) Adequate examples in society; and (14) Stability in life circumstances. According to Zijlstra et al., (2013) the pedagogical environmental conditions measure the quality of the pedagogical environmental conditions in the family, or society, longitudinally. Zijlstra et al., (2013) assert that the child will have optimal development opportunities, if all pedagogical environmental conditions are of good quality.

6.9.5. The Social and Pedagogical Situation Questionnaire (VSPS)

VSPS is based on the multiple risk model, and is used to analyse problematic situations, in which children develop (Van der Ploeg, 2007). The VSPS is a standardized instrument and is also used to measure the child’s environmental setting and socio-emotional development by professionals. Behavioural scales in the VSPS are used to map out the behavioural problems of children.

These scales are divided into internalizing (for example, depression, anxious and social anxious) and externalizing (for example, hyperactive, aggressive and anti-social) behavioural problems. The responses of the VSPS are presented in six categories: 0 = no (no help needed); 1 = slightly (still no help needed); 2 = slightly to clearly (help may be needed); 3 = clearly (help needed); 4 = clearly to very clearly (help needed quickly) and 5 = very clearly (help needed urgently). According to Zijlstra et al., (2013), the completion of the VSPS is done by the parents, teachers and other professionals to report on the socio-emotional development of children from birth to 21 years of age.
6.9.6 Child Behaviour Checklist (CBCL)

The CBCL was used in a cohort study, conducted by Najman et al., (2008), on mental health screening in early childhood. The questionnaire was completed by the mothers of children, aged 5 and 14 years, after which the children completed their individual questionnaires at ages 14 and 21 years. The CBCL is an instrument, designed for completion by parents of children, aged 4-18 years, and generates scores on the Internalizing Scale for eight syndromes: withdrawal, somatic complaints, anxiety/depression, delinquent behaviour, aggressive behaviour, social problems, thought problems and attention problems.

In addition, a total problem score is achieved by calculating the individual item scores. The responses for the questionnaire of this study were rated on a 3-point scale from 0= ‘not true’ to 2= ‘very true’, or ‘often true’. The results of the study reveals that factor analyses and reliability estimates of sub-scales were consistently produced.

6.9.7. Strength’s and Difficulties Questionnaire

Studies conducted by Machnes-Maayan et al., (2008) suggest that data on behavioural problems in children are usually collected by clinical interviews and standardized questionnaires, such as the Child Behaviour Checklist (CBLC), which is a tool that can be used by parents to report on the behavioural and emotional problems of children and adolescents. CBLC has been found to be effective when used in clinical practice and research, and may serve as a screening tool, or a basis for diagnostic formulations (Pauschardt, Remschmidt & Mattejat, 2010). This instrument yields a total problem score, two broadband scores (internalizing and externalizing problems), and eight different syndrome scales (Pauschardt, Remschmidt& Mattejat, 2010).

Machnes-Maayan et al., (2014) counter that the CBLC consists of too many items (140 items) and, therefore, is very time consuming. According to Machnes-Maayan et al., (2014), the Strength and Difficulties Questionnaire (SDQ), developed by Goodman (2001), is a much shorter (25 items) self and parental-report screen for the detection of behavioural problems in children and adolescents from the ages of 4 to 16 years. In addition, the findings of the SDQ have correlated positively with the CBLC, and are found to be effective in diagnosing psychosocial problems in children and adolescents.
The SDQ has been validated worldwide, and is available in more than 30 languages (Goodman, 2001; Goodman, Watson & Burke, 2005; Alyahri & Goodman, 2006; Goodman, Iervolino, Collishaw, Pickles & Maughan, 2007; Mathai, Anderson & Bourne, 2004; Goodman, et al., 2004; Becker, Woerner, Hasselhorn, Banaschewski & Rothenberger, 2004; Woerner, et al., 2004; Goodman, Ford, Richards, Gatward & Meltzer, 2000). The items of the SDQ are divided into 5 scales of 5 items each, generating separate scores for conduct problems, hyperactivity, inattention emotional symptoms, peer problems, and prosocial behaviours. According to Goodman (2001), the internal consistency has been good for each of the subscales (mean Cronbach’s Alpha, 0.73).

The scores for the first four subscales (except prosocial behaviours) may be calculated to produce a total difficulties score. Goodman (1998) adds that the SDQ can be completed by parents or teachers in approximately 5 minutes. Goodman, Meltzer & Bailey (1998) also developed a self-report version of the SDQ for children from 11 years and older.

6.9.8. The Developmental and Well-being Assessment Questionnaire (DAWA)

DAWA is a development and well-being assessment, developed by Goodman et al., (2000). This instrument is a comprehensive, semi-structured interview for diagnosing psychiatric disorders and could be administered by trained lay interviewers, or be completed by an individual, online (Goodman et al., 2000; Mansbach-Kleinfeld et al., 2010). Goodman et al. (2000) developed the DAWA to generate the International Classification of Diseases-10, as well as the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, psychiatric diagnoses, such as generalized anxiety disorder, panic disorder, posttraumatic stress disorder, obsessive-compulsive disorder, depressive disorder, attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and conduct disorder. This structured questionnaire could be administered to children and adolescents in the age-group of 11-17 years, and to parents, who could complete the questionnaire for children younger than 11 years of age.
6.9.9. Early Childhood Generalized Trust Belief Scale (ECGTBS)

A study conducted by Betts, Rotenberg and Trueman (2009) indicates that generalized trust is central to the formation, maintenance and survival of relationships, and relies on the ability of an individual to develop a sense of trust, rather than mistrust, during infancy (Erikson, 1995). Harris (2007) highlights that children, as young as three years old, can conceptualize and express trust, but there is no corresponding measure of generalized trust for children during early childhood development at schools (5-8-year old). The ECGTBS was developed as an age and gender-appropriate scale, to assess generalized trust, reflecting the multifaceted nature of trust for children in ECD.

According to Betts et al. (2009), there is limited research on the trust of early school-aged children, and a scale, therefore, would facilitate research. Betts et al. (2009) also aver that children begin to conceptualize the underlying social attributes of others during early childhood. The development of the ECGTBS was guided by three bases, with two dimensions of target, and two domains of interpersonal framework by Rotenberg (1994; 2001). The ECGTBS was designed to assess the three bases of trust (reliability, emotional trust and honesty), as it applies to the cognitive domain (trust beliefs), targeting mothers, fathers, teachers and peers. A study conducted by Rotenberg, Fox et al., (2005) reveals that children from 9-11 years old have higher generalized trust in mothers, fathers and peers, than in their teachers. A study conducted by Betts et al., (2009) reveals that the ECGTBS demonstrated acceptable test-retest reliability over two weeks ($r$ (39) = .56, $p<.001$), and stability over a year ($r$ (207) = .33, $p<.001$).

6.9.10. Pediatric Quality of Life Inventory (PedsQL)

The PedsQL Inventory is designed to assess the health-related quality of life of children from the ages of 2-16 years and include 15 items that assess psychosocial adjustment, for example, problems with “feeling afraid or scared; playing with other children; doing the same preschool/school activities as children his or her age” . A study conducted by Mensah et al. (2013) indicates the psychosocial health summary Cronbach’s Alpha score for PedsQL as .82-.87, with lower scores representing bad psychosocial adjustment and was derived for 89.1%, 82.1%, 99.8%, and 99.0% for
children at ages 4-5 and 10-11, respectively. Their study further indicate the Cronbach’s Alpha score for subscales on emotional functioning as .71-.81, social functioning as .76-.80 and school functioning as .56-.74. The PedsQL Inventory for this study was completed by the parents of the children for the cohort across all waves.

6.9.11 Mental Ability Test

The Mental Ability Test was designed to measure the child’s mental ability related to school learning. It is also a means to assess a child’s intellectual resources related to school learning. According to Bouffard et al. (2011), the chronological age of children was used to transform their total number of correct responses into indices of mental ability, making it possible to derive an IQ score.

This study further indicates that the IQ scores between year correlations were high and ranged from .78-.83. The Mental Ability Test needs approximately 50 minutes to complete and is done by children. Data on the mental ability of children were collected for this study over a period of 5 years. Data on the positive and negative indicators of the psychosocial adjustment (for example, positive self-perception, positive evaluating of own abilities, use of social comparisons and to integrate past successes and failures) of children were collected only once, when children were in first or second level at junior high school.

6.9.12. Socio-Demographic and Psychiatric Assessment Form

Socio-Demographic and Psychiatric Assessment Form was designed by Karabekiroglu et al. (2013) to access factors that were relevant to their study, such as, age, gender, family structure (nuclear, extended, single parent, other), number of siblings, household population, family income, primary caregiver (mother, grandmother, nanny, other), languages spoken in the household (based on ethnicity), age, education and occupation of the parents, parental consanguinity, complications during pregnancy and birth, physical illnesses, major life events, day care, time spent watching television, corporal punishment, availability of social support sources for parents, and access to professional help in child rearing. Primary caregivers were asked to provide information on: (1) socio-demographic features of the parents and the family; (2) developmental features, medical and psychiatric history of the child; (3) possible social
stress factors that might affect psychosocial development of the child (Carter & Briggs-Gowan, 2006); (4) general health status of the family and (5) pregnancy, labour history, psychosocial education and social support resources of the mother and/or caregiver.

6.9.13. Brief Infant-Toddler Social Emotional Assessment (BITSEA)

The BITSEA is a 42-item scale that screens social-emotional/behavioural problems and/or social/emotional developmental delay that includes autism spectrum disorder in early childhood. The behaviour described in each item is included in the problem, or competence, subscale. Items for this instrument are rated on a 3-point Likert scale with 0=not true/very rare, 1=somewhat true/sometimes and 2= fairly true/frequent, and is based on the behaviour of a child in the immediate past 30 days. The BITSEA can be completed by the primary caregivers of a child.

The higher the total scores on the problem subscale (BITSEA/P), the higher the level of behavioural and emotional problems, and the lower total scores on the competence subscale (BITSEA/C) indicate a lower competency levels. The reliability and validity of the BITSEA, as a screening tool, was supported by previous studies conducted by (Karabekiroglu, Briggs-Gowan, Carter, Rodopman-Arman & Akbas, 2010; Karabekiroglu et al., 2009). The BITSEA is a reliable and valid instrument that can be used in primary health care services and in a psychiatric clinical setting for assessing social-emotional/behavioural problems and delays regarding competence in infants and toddlers.

6.9.14. Brief Symptom Inventory (BSI)

The 53-itemed BSI, an abbreviated form of the 90-item checklist (SCL-90), requires approximately 5-10 minutes to complete. The items are rated on a 4-point Likert scale with 0= ‘not at all’ to 4= ‘extremely’. According to Karabekiroglu et al. (2013), a standardization study of the Turkish version of the BSI yielded five distinct factors, namely, anxiety, depression, negative self, somatization, and hostility. The possibility of psychopathology is indicated by obtaining higher scores. The instrument can be completed by the interviewer based on the selections of the primary caregiver.

6.9.15 Rutter Children’s Behavioural Questionnaires
The Rutter Children’s Behavioural Questionnaire for teachers (RB2) was used in a longitudinal study conducted by Honkanen et al. (2014). This questionnaire was used to assess the emotional and behavioural problems of children at the age of 8 years. The questionnaire consists of 26 items on a 3-point rating scale with 2= ‘certainly applies’; 1= ‘applies somewhat’ and 0 = ‘does not apply’. The RB2 comprises of three subscales: (1) emotional/neurotic; (2) behavioural/antisocial and (3) hyperactivity. The validity of the questionnaire was constructed in a study conducted with 8-year old children in Finland (Kresanov, Tuominen, Piha & Almqvist, 1998).

6.10. The studies included in this review made use of the following indicators for psychosocial health and well-being, as illustrated in Table 6.4.

- **Depression**: (Zijlstra et al., 2013; Jianduan et al., 2009; Najman et al., 2008; Allgaier et al., 2014; Machnes-Maayan et al., 2014; Troop-Gordon & Gerardy, 2012; Karabekiroglu et al., 2014);

- **Anxiety/social anxiety**: (Zijlstra et al., 2013; Jianduan et al., 2009; Najman et al., 2008; Machnes-Maayan et al., 2014; Karabekiroglu et al., 2014);

- **Hyperactivity/inattention**: (Zijlstra et al., 2013; Machnes-Maayan et al., 2014; Mensah et al., 2013; Karabekiroglu et al., 2014; Honkanen et al., 2014);

- **Aggression/peer aggressiveness**: (Zijlstra et al., 2013; Jianduan et al., 2009; Najman et al., 2008; Troop-Gordon & Gerardy, 2012; Machness-maayan et al., 2014; Karabekiroglu et al., 2014);

- **Anti-social behaviour/prosocial behaviour**: (Zijlstra et al., 2013; Jianduan et al., 2009; Najman et al., 2008; Allgaier et al., 2014; Machnes-Maayan et al., 2014; Troop-Gordon & Gerardy, 2012; Bouffard, Vezeau, Roy & Lengelè, 2011; Karabekiroglu et al., 2014; Honkanen et al., 2014);

- **Attention problems**: (Jianduan et al., 2009; Najman et al., 2008; Karabekiroglu et al., 2014);

- **Problem behaviour**: (Jianduan et al., 2009; Najman et al., 2008; Allgaier et al., 2014; Machnes-Maayan et al., 2014; Betts, Rotenberg & Trueman, 2012; Mensah et al., 2013; Bulotsky-Shearer, Fernandez & Rainelli, 2013; Karabekiroglu et al., 2014; Honkanen et al., 2014);
- **Victimization/peer victimization**: (Jianduan *et al.*, 2009; Troop-Gordon & Gerardy, 2012; Karabekiroglu *et al.*, 2014);
- **Social skills**: (Zijlstra *et al.*, 2013; Mensah *et al.*, 2013; Bouffard, Vezeau, Roy & Lengelè, 2011);
- **Conduct problems**: (Machnes-Maayan *et al.*, 2014; Mensah *et al.*, 2013),
- **Emotional/neurotic behaviour**: (Honkanen *et al.*, 2014), behavioural problems (Honkanen *et al.*, 2014);
- **Learning and/or comprehension problems**: (Karabekiroglu *et al.*, 2014); and
- **Self-perceived academic competence** (Bouffard, Vezeau, Roy & Lengelè, 2011).

### 6.11. Psychosocial health and well-being in ECD

The study conducted by Troop-Gordon and Gerardy (2012) indicates that the victimization-related beliefs of parents predict children’s socio-emotional functioning, as well as moderate links between children’s peer harassment and their psychosocial adjustment. Their study indicates that normative beliefs forecast greater social difficulties and emotional distress. Additionally, avoidance beliefs were found to serve a potentially protective role for the social development of children not victimized by their peers.

A study conducted by Betts, Rotenberg and Trueman (2009), reveals that concurrent asymmetric quadratic relationships indicate the importance of midrange generalized trust. Their studies show further that children with a very high generalized trust experienced greater loneliness and children with very low generalized trust had fewer friendships than children with midrange trust. However, a study conducted by Mensah *et al.* (2013) reveals that boys and girls, who entered puberty early, experience poorer psychosocial adjustment at this stage. Their study indicate further that these psychosocial differences were already evident at ages 4-5 and 6-7 years and persisted to at least 10-11 years.

According to Mensah *et al.*, (2013), similar patterns are evident for behaviour difficulties, only for boys, and not girls, because early puberty was not related to behaviour difficulties in girls. Their study indicates further that children with early puberty appear to have different behavioural and social adjustment patterns from preschool through early adolescence. The findings of a study conducted by Karabekiroglu *et al.* (2013), based on feedback from
primary caregivers on socio-emotional problems in young children, reveals that girls (9.5%) experience more social-emotional problems than boys (9.1%). According to Karabekiroglu et al. (2013), the separation of a child from the mother for more than a month, and the lower the family’s income appear to be significant predictors of social-emotional problems. A report by the caregivers reveals that the variables of the psychological well-being, education and access to resources of mothers, are closely related to the social-emotional well-being of their offspring (Karabekiroglu et al., 2013).

6.12. Early childhood development and the impact of the environment on the psychosocial health and well-being of children in ECD.

A study conducted by Zijlstra et al., (2013) targeted children from birth to twenty years of age. Their study found that the current quality of the childrearing environment is negatively related to the risk of internalizing behavioural problems in children. They add that the quality of the childrearing environment is compared to alternative rearing situations. In their opinion, a situation (for example, family home, school, community) of the highest quality, offers the child the best opportunities to develop.

Another study, conducted by Honkanen et al. (2014), on how teachers assess emotional and behavioural problems in children, suggests that mental health is the foundation of subjective well-being, and adequate functioning of both individuals and society. Their study found that children, who had emotional problems, according to their teachers, were more prone to withdrawal, as well as social problems in adolescence. They add that the presence of childhood behavioural problems is a robust predictor of later antisocial behaviour. According to Elander, Simonoff, Pickles, Holmshaw and Rutter (2000) subjects, who had symptoms of hyperactivity in childhood were more likely to be delinquent in late adolescence.

Their study further shows that teachers’ assessments of children were predictive of their self-reported mental problems in adolescence, which, in turn, were strongly associated with concurrent self-reported life satisfaction.

According to Honkanen et al., (2014), in order to support favourable growth of children into well-adjusted adolescents, and to intervene, as early as possible, in the event of adverse progression, both teachers’ assessments of children and the adolescent’s self-rated overall
life satisfaction should be acknowledged. This study further indicates that the building, preserving and promotion of mental health, as well as the prevention of disorders during the entire lifespan of an individual, is not only the duty of the health sector, but also of the society as a whole, across various domains.

6.13. Discussion

The aim of this review was to examine a variety of valid and reliable instruments that assess psychosocial health and well-being in ECD. The review focused on studies conducted internationally, which showed that instruments were often designed to identify physical ailments, the person’s ability to adjust to particular situations, psychiatric diagnosis, educational and intellectual abilities, as well as the personal characteristics of children over their entire lifespan. This review is similar to a study conducted on the instruments used to assess child and youth well-being in child welfare practices (Lou, Anthony, Stone, Vu, & Austin, 2006). Consequently, the need of a child, to be assessed on a multi-dimensional level that addresses the role of the family, schools and the community, is highlighted. For example, the current qualities of the childrearing environment are perceived to be negatively associated with internalizing (depression, anxious, social anxiousness) behavioural problems in children (Zijlstra et al., 2013). Their findings include that a high quality environment will aid children to thrive and have the best opportunity possible across their lifespan.

Similar studies have shown that the well-being of children is not merely the product of the internal characteristics of the child, but focus on the interaction between the child and his/her environment (Lou, Anthony, Stone, Vu & Austin, 2006; Buhs, Ladd & Herald, 2006; Shonkoff & Garner, 2012). Additionally, this review identified that the promotion of psychosocial health and well-being challenges in ECD will promote positive child development outcomes in later life. However, early identification of psychosocial health and well-being, through assessments, could be regarded as a form of prevention that will detect any psychosocial challenges experienced by children across their lifespan.

The primary goal for using instruments that assess psychosocial health and well-being challenges in children is to put preventative measures in place, to act as a buffer against psychosocial challenges. The instruments included in Table 6.4 are merely examples of
the available instruments that measure psychosocial health and well-being over a broad domain of the child’s life and do not reflect a complete, or definite accounting of instruments that may be useful. The instruments, as indicated in Table 6.4, were selected because they had commonly been used in both research and clinical practice, which deems them reliable and valid, as well as feasible to be used in schools (Levitt, Saka, Romanelli & Hoagwood, 2007).

The selection of appropriate psychosocial health and well-being assessment instruments depended on factors, such as the age of children to be assessed. For example, in a study conducted by Honkanen et al. (2014), reports from teachers indicate that children, who experience socio-emotional problems are more prone to withdraw and be socially challenged in adolescence. The same study suggests that behavioural problems in children were predictive of attention problems and delinquent behaviour. Besides, studies indicate that parent and teachers are typically the best observers and reporters of behaviour in childhood (Levitt, Saka, Romanelli & Hoagwood, 2007; Guerra & Luciano, 2010; Mashburn & Serpell, 2011). A further suggestion for early identification of psychosocial health and well-being challenges in schools, is to train and enable teachers to identify these challenges, as teachers are already well integrated into the school system (Levitt et al., 2007).

6.14. Conclusion

The use of a valid and reliable instruments to assess psychosocial health and well-being in schools could have a number of advantages for children, their families, teachers and the community. Instruments that assess psychosocial health and well-being in primary schools could serve as a baseline indicator to provide a measure of the child’s status at the initial stage of psychosocial challenges experienced. This measure would enable the teacher to maintain a record, in order to compare the child’s challenges at the start and to implement intervention measures. This assessment will be of importance to both the teacher and the family, as it will enable the teacher to monitor the child’s psychosocial challenges over a period of time. The assessment will also allow teachers to identify which services are needed, in order to aid the child facing psychosocial health and well-being challenges. In addition, the assessment of children in primary schools would aid the teachers to draw on the strengths and weaknesses of the children and allow teachers to acquire new information about the child.
Psychosocial health and well-being assessments will contribute to the overall comprehensiveness of the report given to the parents of children by the teachers. This was the motivation to design a School Health Index Score Card that assesses psychosocial health and well-being for children in Early Childhood Development, in multiple context.

In this chapter, the systematic review, used to identify literature pertaining to instruments that were previously used to assess psychosocial health and well-being in ECD at primary schools, was presented. A discussion and conclusion section that captures the use of the review information, in order to design the SHISC was included. This chapter comprises the second stage of phase one of the study, the baseline assessment. This chapter is followed by Chapter 7, in which, phase two of the study will be discussed in detail.
CHAPTER SEVEN

ACTION PLANNING: DESIGNING A SCHOOL HEALTH INDEX SCORE CARD – SOUTH AFRICAN CONTEXT

7.1. Introduction

This chapter comprises phase two of this current study that reports on the design of the School Health Index Score Card for primary schools in South Africa. Phase two is divided into two stages: Stage one is the actual design of the SHISC, followed by a focus group discussion with peers to test the feasibility of the SHISC, and Stage two is the Delphi Study on the effectiveness of the SHISC with relevant stakeholders in ECD. In this chapter, the following objective will be addressed:

- Design a School Health Index Score Card for primary schools to assess psychosocial health and well-being of learners in Early Childhood Development.

7.2. Background

The first years in the life of a child is a crucial period for optimal development across the entire lifespan. Development refers to the change, or growth, that occurs in children, beginning in infancy and continuing into adulthood (Vogler, Crivello & Woodhead, 2008). Development is characterized by the process of individual growth, change and transformation, and is frequently conceptualised in terms of moving through a sequence of age-approximate stages (Vogler et al., 2008; Latouf, 2008).

Mustard (2010) suggests that the development of a child in the early years, establishes the basic architecture and the functioning of the brain; and the development of the child’s potential is critical during this phase. Psychosocial health and well-being plays an important role in ECD, and lay the foundation of life-long learning and development for children to transit to adulthood (Cleassens & Garrett, 2014; Shonkoff, 2009; Roa et al., 2014).

Studies further indicate that investing in ECD has revealed long-term economic success for any country, with numerous countries, investing in ECD, securing the socio-economic, educational and psychosocial health and well-being of the future of society (Cleassens &
Garrett, 2014; Chürr, 2012). Studies have revealed a positive relationship between the quality of childcare and child development outcomes, and highlight the importance of high quality services in ECD (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2008). According to Knudsen, Heckman, Cameron and Shonkoff (2006), a child’s physical, social, emotional, language and cognitive development must be the core and nurturing aspects of quality ECD programmes and services. Research reveals that Early Childhood Care and Development describes a range of services that promote those conditions of care, socialisation and education in the home, or community, which enhance the holistic development of children (Leaper & Bigler, 2011).

Research reveals that governments, globally, have been developing and enacting policies to enhance the well-being of children, including the improvement of school attendance and the quality of preschool education (Rao & Sun, 2010; 2011). According to Gara, Long and Vargas-Baron (2008), development is a foundational concept for early childhood policy and practice, and it is central to realising the basic human rights of children. A child’s right to development is fundamental and is seen as one of the most essential principles of the UN Convention on the Rights of the Child (United Nations International Children’s Emergency Fund [UNICEF], 2013). Although children have the right to optimal development, studies reveal that approximately 200 million children in sub-Saharan Africa and Southeast Asia remain below their developmental potential (Grantham-McGregor et al., 2007; Christian et al., 2013; Piwoz, Sundberg & Rooke, 2012; Wamani, Astrom, Peterson, Tumwine & Tylleskar, 2007).

However, as indicated in Chapter two, various studies show that there are globally no accepted tests for ECD, which is important for the different domains of socio-emotional, cognitive, physical and language development of children (Rao et al., 2014; Rao, 2010; Rao & Sun, 2011; Sun, Rao & Engle, 2012; Sylva et al., 2006). These studies indicate that measurements which focus only on one domain, were found not to be appropriate test for the holistic development of children in their early phase (Rao et al., 2014; Curriculum development Council, 2006, p. 17).
7.3. Designing a School Health Index Scorecard – South African Context

The School Health Index Score Card (SHISC) for this study was designed, similar to a School Health Index (SHI) that was designed by the National Centre for Chronic Disease Prevention and Health Promotion (CDC, 2012) for elementary schools in Atlanta, Georgia. Literature indicate that the SHI was probably the first comprehensive tool that was designed specifically for schools, to assess, and to improve, the strengths and weaknesses of health promotion policies and school health programmes. The intention of the implementation of the SHI was to develop action plans to improve the overall health of school learners. The SHI enables schools to:

- Identify strengths and weaknesses of health promotion, as well as school health policies and programmes;
- Develop action plans to improve the health of learners; and
- Involve teachers, parents, learners and the broader community to improve school services.

The SHI, designed by the CDC (2012), consists of eight core modules:

1. Health and safety policies and environment;
2. Health education;
3. Physical education and physical activity programmes;
4. Nutrition services;
5. School health services;
6. School counselling and psychological services;
7. Health promotion for staff; and
8. Family and community involvement.

The completion of the SHI is an important measure and the first step towards improving the schools’ health promotion, as well as health policy and practices (CDC, 2012). Each module consists of a questionnaire that could be completed by the team. The SHI is a 78-item questionnaire that asks participants to rate the extent to which policies and programmes are implemented, on a 4-point Likert scale, which ranges from “fully in place” to “not in
Comprehensive explanations for each rating level, and questions for each module, could be used to translate the results, in order to develop appropriate plans for improvement (CDC, 2012). The SHI, therefore, could serve as formal documentation for health promotion and school health activities in a school setting. The SHI should not be used to compare schools, or to evaluate the staff, but should only be used as a self-assessment and planning tool for community-organizing and educational processes (CDC, 2012). The CDC further suggests, that the most important fact to remember is that the completion of the SHI is a group effort, and before the implementation of the SHI, a school health index team needs to be formed (CDC, 2012). The responsibility of this team of individuals would be to complete the SHI.

The strength of implementing the SHI emerges from the interaction of different individuals that form part of the school community, such as the school health council, or the formation of a new subcommittee of the school management council, or the governing body (CDC, 2012). These stakeholders need to form strategies to improve school policies and programmes, as the interaction and communication between SHI participants are among the most important outcomes for meaningful assessment, planning and implementation of the process (CDC, 2012). The SHI was implemented in, approximately, 46 USA states (for example, 300 schools in Missouri, 139 schools in Kentucky, 109 schools in Kansas) and internationally, at schools in Canada, Mexico, Egypt, Saudi Arabia, Oman and West-Africa (School Health Index, 2014). Against this background, and due to the lack of appropriate instruments to assess and monitor of psychosocial health and well-being of learners in ECD, the researcher resolved to design a School Health Index Score Card for primary schools in South Africa.

7.3.1. Overall description of the Draft SHISC

The SHISC includes the name, grade, educator, name of school, and date of assessment of the learner. It also comprises 6 subscales on a 3-point Likert scale that range from “not in place” to “fully in place”, while a total score for each module can be calculated. The SHISC is a module that covers six domains of psychosocial health and well-being of learners in ECD and comprises 48 questions. The domains are as follows:
(1) Psychosocial education for teachers. This domain comprises fourteen questions, such as: Identify and track learners with social functioning challenges (e.g. getting along with peers and manage daily activities); Identify and track learners with emotional functioning challenges (e.g. feeling fearful, upset, angry, tired, worried, trouble sleeping);

(2) Family support: this domain consist of three questions such as: communicate with families on academic performance of learners; family involvement in school-decision-making for referral of learners according to perceived challenges; family involvement in learning at home,

(3) Community support domain which consist of three questions such as: recruit and involve community members as volunteers to enrich school health and safety programs; train community members as volunteers to enrich school health and safety programs,

(4) Co-curricular support domain consist of two questions such as: teachers/educators in still the values to respect the view and feelings of others(e.g. peers, staff members, parents); teachers/educators provide motivation for learners to develop social skills (e.g. interaction and good communication with others, ability to listen, politeness, assertiveness, friendliness, leadership),

(5) Systems/services for current school psychosocial support domain consist of fourteen questions such as: social welfare services provided by a social worker for learners and their parents/caregivers; counselling services provided for learners, parents/caregivers by a counsellor e.g. trauma, HIV); identification and track learners with chronic health conditions (e.g. diabetes, obesity, asthma, tuberculosis, worm infestation, measles, HIV); and

(6) Safety and protection for learner-well-being domain which consist of twelve questions such as: written school psychosocial health and safety policies; prevent harassment and bullying, victimization/peer victimization). The items of the school health index score card are scored and range from (0-2). The score card uses a dominator (96) to calculate the overall score. For example: for column totals: all numbers should be added and entered in the corresponded
Once the numbers for each column are calculated, the overall number will be divided by the denominator, which is (96) in this case, which is the maximum total possible. The result will be reflected as follows: Total points/96 x100 to arrive at a percentage. The higher the percentage score, the less intervention is needed by the relevant school authority. The lower the percentage score, the more intervention is required.

The proposed SHISC will enable teachers to identify and assess learners with psychosocial health and well-being challenges in ECD. Subsequently, the teachers will refer learners to the various resources appropriate to the situation, based on the assessments. Therefore, using the SHISC as an intervention tool to refer learners to the required available resources will aid learners and their parents/primary caregivers in this important developmental phase, might be prudent.

The SHISC will be a substitute of the current journals that teachers utilize daily to report on learners in their class. Teachers have indicated that the proposed SHISC would make their task easier, as it was challenging to keep a journal (a booklet) for each learner in their class, being time consuming and tiresome. The interviews conducted with teachers revealed that an instrument like the SHISC would make it easy to report on learners on a daily basis. Besides being useful for intervention, this proposed SHISC would enable schools to develop an action plan to improve the psychosocial health and well-being of learners, not only in schools, but also at home, and in the community. In addition, this will enable teachers, parents, learners and the community to engage in raising awareness about the importance of psychosocial health and well-being in ECD. The design of the SHISC was based on the findings of phase one of this study, as explained in the methods section in Chapter three.

7.3.2. Focus Group Discussion

A focus group discussion was arranged with the same sample that participated in the qualitative data collection part of stage one of phase one of this study. The aim of the focus group discussion was assess the feasibility of the drafted SHISC with ECD teachers.
7.3.2.1 Data Collection Tool

The following schedule of questions (Appendix 10) were posed to the participants during the focus group discussion.

1. Do you think the school health index score card is user friendly for primary schools in South Africa?
2. Do you think the school health index score card is useful for a primary school setting?
3. Is the language appropriate for teachers/educators in the school health index score card?
4. Is the school health index score card a useful tool which teachers/educators can use to assess learners with psychosocial health and well-being challenges?
5. Does the school health index score card focus on the psychosocial health and well-being by learners in general?
6. Can the school health index score card be implemented in primary schools in South Africa?
7. Does the school health index score card provide teacher/educators with a clear understanding of psychosocial health and well-being?
8. Does the school health index score card address all psychosocial needs for children in early childhood development?

Different terms such as psychosocial health and well-being were explained to the participants to make it easier for them to understand the purpose of the score card. At the end of the first session, the participants suggested that it would be much better to meet with the entire participants at the end of the day so that the participants can share information concerning the effectiveness of the score card. Bringing forth new ideas and raise any ideas or their opinions.

The research team was also informed that school closes at 13h30 for children in the early childhood developmental phase, after which the teachers will have time
to do administration till 14h00 and then need to attend another workshop for teachers in this phase. After the departure of the first participant, the research team decided to call on the second participant to pilot the scorecard and then use the remaining participants for the main study. The second part took place exactly as the first part of the session, of which the second participant also felt the need to meet with the bigger team later the day. After the departure of the second participant at 12h00, the research team were left with approximately 45 minutes to recap and to prepare for the workshop as discussed with both participants. However, before meeting with all participants, the research team went to the principal’s office informing the principal about the request and the principal agreed, but also informed us about the workshop of the teachers later the same day. The team was happy and ready to take on this opportunity granted by the principal. The workshop for the main study started approximately 13h35.

7.3.2.2. Data Collection

Informed written consent was obtained from the participants to be audio-recorded before the commencement of the focus group discussion. Data were obtained from the focus group discussion by means of audio-voice recordings and hand-written notes recorded by the researcher’s assistants. Transcriptions were done of the data obtained from the audio recordings by means of thematic analysis. A qualitative approach was employed to gather the data by means of conducting a focus group discussion.

The researcher performed the introduction, discussed the aim, objectives, as well as the ethical considerations of the study, and explained the presence of the two research assistants. Informed consent was obtained from all the participants after the researcher explained the aim and objectives of the studies. The researcher asked whether all the participants were comfortable with the presence of the librarian, and also requested permission to record the session, to which the participants voluntarily agreed, on both counts. Active participation took place among all the participants; however, the older participants had difficulty with understanding certain words and requested that the researcher explain the meaning of these words (for example, the meaning of psychosocial) as they were
Afrikaans speaking, and the score card was in English. Another participant also requested that the focus group discussion to be scheduled as early as possible, because they were too tired to participate in any event in the afternoon, as their work-load with more than 45 children in a class, was not an easy task. The researcher, therefore, explained why the focus group discussion had to take place at such an inconvenient time.

During the session, the participants informed the research team that the scorecard would be useful in all grades, from grade R to grade 12. Some of the participants indicated that, while perusing the through the drafted scorecard, they could visualize some of the children in their classes experiencing some, if not most of the challenges indicated. The participants also indicated that the scorecard would be very useful, there is no legal interference to observe children experiencing challenges. Previously, they made use of a hand-written journal for each child to track problems, which is very time consuming.

The focus group discussion lasted approximately 45 minutes, after which the participants had to leave, in order to attend another workshop that was scheduled for them. The researchers thanked all the participants for their involvement, effort and contributions. The research team thanked the principal for allowing them to collect data for the study at the school.

7.3.2.3. Data Analysis

The researcher made narrative descriptions of the content after carefully listening to the audio voice recordings, taking into consideration the personal notes and reports of the two research assistants. The researcher listened to the audio voice recordings in order to gain a whole picture of the discussions by the participants. Transcriptions of the recordings were made and validated with the research assistants for clarification, as well as to gain an understanding of the aspects that were not clear to the researcher. The notes of the research assistants, flipcharts, audio voice recordings and transcripts was carefully grouped together in order to consolidate the data. Several themes emerged from the data, while the researcher used thematic analysis to analyse the data. The data was cross-checked by the
study supervisors to ensure objectivity, reliability and validity of the results.

Table: 7.1: Themes from data analysis

<table>
<thead>
<tr>
<th>Main Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Psychosocial health and well-being</td>
<td>(i) Social- emotional problems, fine motor skill, cognitive skills, physical characteristics</td>
</tr>
<tr>
<td>2. Recordkeeping</td>
<td>(ii) Journals, profile keeping</td>
</tr>
<tr>
<td>3. Systems/Services</td>
<td>(iii) Referral systems</td>
</tr>
<tr>
<td>4. Community issues</td>
<td>(iv) Communication with teacher and parent/caregivers</td>
</tr>
<tr>
<td>5. Implementation of the school health index score card</td>
<td>(v) Learning through play</td>
</tr>
</tbody>
</table>

**Theme 1: Psychosocial health and well-being**

The participants defined psychosocial health and well-being as the visible physical characteristics of children; things that are visible to observe in children. The participants expressed that psychosocial health and well-being is about muscle development and the children’s ability to function by doing daily tasks, as instructed by the teacher. They also referred to the different behaviour of children in the classroom and the way that children interact with their peers. The participants expressed their concern about children who are HIV positive, children who have no food to eat, as well as children who are fatigued due to illness. While perusing the score card, the participants stated that they could actually visualize children with health problems in their classes.

**Sub-theme (i): Socio-emotional problems, fine motor skill, cognitive skill, physical characteristics**

The participants commented that the score card would help them to assess children with psychosocial health and well-being challenges, as indicated by the following statements:

“…social in general with the children and the social and emotional development of the child. The education, the development of the child…’’
“Thus uhm…overall picture of the child. The child uhm…appears. The judgment of the first glance of the child I will say”.

“What health concern, we will now take a look at how he is physically in class and then to know…his meals regularly at home or at school also. His neat, his clothes clean or so to see”.

“Definitely. The score card, according to the questions that will help you to be able to observe some problems of the children”.

**Theme 2: Recordkeeping**

All the participants revealed that they needed to keep a journal (hand-written booklet) for each child, their own idea, to record the behaviour of the children in their classrooms. These records needed to be updated by hand on a daily basis. The participants’ opinion was that this practice was difficult and time consuming. They expressed that children in the early childhood phase are difficult to manage and that the daily handwritten records of children’s behaviour, health, nutrition, socialization with peers and their academic achievements, added to their burden.

They continue by stating that these journals were reserved and recorded in the learner profile at the end of a term. The participants expressed their views concerning the usefulness of the SHISC. They highlighted that the SHISC should also be completed by the parents/primary caregivers regarding any psychosocial aspects of their children. Their opinion was that the score card should be sent home with the child, as part of the communication. They also supposed that once the parents/primary completed the score cards, the children should bring them back to the schools on a daily basis, for the teachers to continue the monitoring of the child.

**Sub-theme (ii): Journals; Profile keeping**

Several questions pertaining the content of the score card were posed to the participants, and the following responses were received from the participants:

“I had to write down everything on my own. But I did not…as I now
have a tool that can guide me how I should do it…how it should be done, do you understand?”

“…we write every day but that one was so and every quarter you can see that there were kids. They improve. They are no longer crying or they are not set aside.”

“We have a journal that we should enter every day and such. We have a curriculum advisor he read all the reports when he comes.”

“Think…it would be good for the scorecard to implement as proof because the score card has the name of the student, the grade, the educator, and the name of the school and the time (day) when you did it. Think it is appropriate…”

“It would be very appropriate”

**Theme 3: System/Services and Policies**

The participants expressed their views concerning the different systems/services that were available at schools. They made reference to Question 24; *Psychological services provided by a school psychologist*. According to the participants’ opinions, although there were services available at school, such as psychological services, the school psychologist did not know their children like they did. They stated that the psychologist enters their classroom, sits and observes a particular child and makes recommendations afterwards. However, the participants contended that the score card would enable them to *better* assess the child and if assistance was required, the child would be sent, on behalf of the principal and the parent/care giver, for the available services suitable for children challenges. They continued, by expressing that, when children are sent to the school psychologist, they returned worse than before being referred. The participants emphasised that children in the early childhood phase are difficult to manage, as they come from very poor households and are allowed to “act out” at school. However, they believed the score card would be useful for them to assess the child according to his/her behaviour. The participants expressed their feelings about referral of learners, as follows:
Sub-theme (iii): Referral systems

Participants commented that, although there were various services available for children at school, these services were not fully in place, because the school was located in a rural area, which made it difficult for learners and their parent/primary givers to benefit from such services. Children, who were experiencing psychosocial health and well-being problems, therefore, were often referred for support services, whether psychological, medical or social services.

“psychologist, but they do not know the kids like we know our children.”

“then she (psychologist) say the child is just naughty and that the child just need some time out, but I feel they are not 100% with you because you are the one that sit with the child to the end of the day.”

“and when the children comes back (psychologist) then it (behaviour) is just worse.”

“Here comes a bus twice every year to the school to examine the children, and they send letters home with the children, should they needs treatment.”

Theme 4: Community Issues

The participants were of the opinion that the score card addresses the need for teacher-parent communication. They affirmed that the score card was effective, as it not only allowed them to assess teacher-child interaction, but also teacher-parent interaction.

Sub-theme (iv): Communication teacher with parent/caregivers

The participants agreed that the score card is a very useful tool, especially when the teachers have teacher-parent meetings.

“What is wrong with the child and how do I handle the situation…Do you understand where the communication comes from.”
“The parent should be as open as possible with me.”

“So do you understand all things we need to know the family of the child.”

**Theme 5: Implementation of the SCHISC**

The participants mentioned that the SHISC was comprehensive and should be implemented, as the focus was on the support that children receive from their teachers and parents/primary caregivers. They also mentioned that teachers and parents/primary caregivers play an important role in motivating children to develop different skills, which they perceive to be important in ECD. The participants further explained that the schools were involved in a project, in which the parent/primary caregiver played an active role, concerning their children’s academic achievement. The logic being that active participation by the parents/primary caregivers facilitates strengthening of the socio-emotional bond with their children.

**Sub-theme (v): Learning through play**

“uhm…what we have done, especially with Grade R, …our boys’ schools in our circuit who ran for three years and at a course to develop a basket with a file and the parent need to help the child with homework at home through play.”

“The child receive basket equipped with all things. A ball, a skipping rope and pins to help the child…and the parents do not really realize in those ten minutes they minutes they help the child to learn math’s language, and life orientation.”

“…and for them it was an eye opener to think my child play, but actually my child is learning.”

**7.4. Delphi Study on the effectiveness of the SHISC**

The effectiveness of the School Health Index Score Card was done through the use of the
Delphi technique. A Delphi study with relevant stakeholders in ECD was done for this stage. The participants for the Delphi comprised teachers, principals, nurses, health promotion officers, social workers, school governing members and early childhood practitioners.

Hasson, Keeney and McKennah (2000) define a Delphi method (DM) as a systematic technique that aims to engage a large number of experts (those who specialise in a particular field of interest, or who have knowledge about a specific subject) in a process to obtain consensus of opinion of, or judgment on, a topic, where the required information is incomplete, or scarcely available. This was done in order to determine whether the designed SHISC was an effective, user friendly, language appropriate and a comprehensive tool that could be implemented and used by teachers to assess psychosocial health and well-being challenges of learners in primary schools. According to Linstone and Turoff (1975), the Delphi method originated in the early 1950’s, when an Air Force-sponsored Rand project, entitled “Project Delphi” sought to reach consensus, through a series of questionnaires and controlled feedback, among military experts on possible U.S. industrial targets for attacks from Russia.

Fish and Busby (1996), suggest that the objective of this method is to gain the most reliable consensus of opinion from a panel of experts. This method is one of the most effective means of facilitating communication between experts in a field, as it allows effective discussions about a topic without having to meet in one location (Castaños & Piercy, 2010). Castaños and Piercy (2010) describes the Delphi as a process to gather information from experts and find consensus among them.

7.4.1. Sample

A study conducted by Wilhelm (2001) indicates that there is no agreement on the panel size for Delphi studies, nor recommendation or unequivocal definition of “small” or “large” samples. Besides, there is a lack of agreement around the expert sample size and no criteria against which a sample size choice could be judged (Akins, Tolson & Cole, 2005). According to Akins et al. (2005), studies have been conducted with practically any panel size, with many Delphi studies published using panels consisting of 10 to 100, or more, panellists. Hsu and Sanford (2007) explain that one of the
characteristics of a Delphi study is the feedback process, which allows the various stakeholders to re-assess their initial judgements, and, therefore, encourage the process of different rounds. The Delphi for this study consists of two rounds and will be discussed accordingly.

7.4.2. Participants

The Delphi participants were purposefully selected to apply their knowledge and experience to a certain issue based on set criteria (Akins et al., 2005). The designed School Health Index Score Card, together with a questionnaire containing different statements, was electronically sent to the stakeholders to gather their expert opinion regarding the content and overall structure of the SHISC. An invitation for participation in the Delphi study (Appendix 11) was sent to twenty stakeholders, of whom, 17 consented to participation. The participants included of 1 principal, 6 teachers, 2 social workers, 2 psychologist/counsellor, 2 early childhood practitioners and 2 nurses. The composition of stakeholders made it possible to grasp the feedback and expert opinions pertaining psychosocial health and well-being of learners in early childhood development and also the effectiveness of the implementation of the SHISC at primary schools. Additionally, although the participants were known to the researcher, they were not known to each other. Anonymous responses to the questionnaires were made and the anonymity, therefore, enhanced the process, as no stakeholder was influenced to make a certain decision, allowing them to freely express their opinions.

7.4.3. Procedure of Data Collection

A formal and structured questionnaire (Appendix 14) was used to obtain information from the stakeholders concerning the comprehensiveness of the School Health Index Score Card. The questionnaire consisted of three sections; section 1 = demographical information of the participants; section 2 = 8 closed ended questions on a 5-point Likert scale; and section 3 = 4 open-ended questions, of which the participants could make any suggestions and recommendations concerning the overall structure and content of the School Health Index Score Card. Individual responses were kept anonymous. The study used two rounds only, as consensus was reached from all stakeholders at the end of the second round.
7.4.4. Data Collection Process

7.4.4.1. Round 1

An invitation letter that contained information with regards to the present study and the need for their professional support was sent to all stakeholders (Appendix 11). The stakeholders were informed that once they accepted the invitation for participation, a consent form (Appendix 12) and information sheet (Appendix 3) attached to the email had to be signed and submitted to the researcher. The signed consent form indicated voluntarily participation in the study by the stakeholder. Once the stakeholders consented to their participation, section 1 of the questionnaire (Appendix 14) requesting the demographics of the stakeholders, such as, gender, race, age, religion, and the occupation, was sent to the respondents for completion, to be returned to the researcher.

7.4.4.2. Round 2

This round involved the completion of section 2 and section 3 of the questionnaire (Appendix 14). Section 2 consisted of eight close-ended questions on a 5-point Likert scale with 1=Strongly disagree with 5=Not applicable. Section 3 consisted of 4 open-ended questions, which allowed the stakeholders to share any suggestions and/or concerns that they may have had regarding the SHISC. The stakeholders were asked to express their opinions by answering the open-ended questions and to provide any added information they felt was important to the design of the SHISC. The researcher provided stakeholders with sufficient space on the questionnaire to complete their answers and return the completed questionnaires to the researcher, as indicated in the invitation letter.

The aim of this exercise was to gather expert opinion from the various stakeholders in ECD, as to whether they were in agreement with the content of the SHISC. Consensus was reached at the completion of round 2, as all the questions fell within the agree to strongly agree categories. All the questions that were rated from strongly disagree, disagree and not applicable needed consensus, but none of the stakeholders rated the content of the SHISC in those categories. After the researcher received all the completed and signed documents, the questionnaires
were printed, coded, captured and analysed accordingly.

7.4.5. Data Analysis

According to Miller (2006), consensus on a topic can be decided if a certain percentage of the votes fall within a prescribed range. For this study, the prescribed range was between agree to strongly agree. The quantitative data obtained from the Delphi was coded, cleared and analysed using the Statistical Packages for Social Sciences version 23 (SPSS version 23). This was done by means of central tendency or mean/median analysis and through the level of dispersion (standard deviation and inter-quartile range) to present the information concerning the collective judgments of respondents (Hasson, Keeney & McKenna, 2000). Similarly, a study conducted by Hsu and Sanford (2007), reveal that using a median score, based on a Likert type scale, is strongly favoured. According to Von der Gracht (2012) this method of analysis is one of the 15 types of consensus measures used in Delphi studies (see Table 7.4).

The qualitative data obtained from stakeholders in the Delphi study was analysed by means of thematic analysis in Table 7.5 in response to specific questions. The Delphi study for the present study was conducted over a period of one month, which initially was expected to spread over three rounds.

7.4.6. Results (as obtained for round 1 and round 2)

Mixed method (MM) sequential explanatory research was used for this current study. Data for the Delphi was collected giving priority to quantitative data collection strand, followed by qualitative data. The method for this current study is different compared with the traditional way of data collection for a Delphi process, which starts with an open-ended questionnaire that serves as the cornerstone for gaining specific information regarding the specific content area from Delphi stakeholders.

The responses concerning the SHISC are illustrated in Tables 7.4 and 7.5. The process was completed during round 2 of the Delphi. The results for the quantitative section of the questionnaire is displayed in Table 7.4. The comments from the stakeholders in the qualitative section of the questionnaire, are displayed in Table 7.5. Correspondences between the researcher and stakeholders were kept confidential, although not
anonymous. Although the participants were unknown to the researcher, anonymity could not be ensured, as the stakeholders had to return the questionnaires to the corresponding email of the researcher.

Table 7.2: Responses from Delphi Study

<table>
<thead>
<tr>
<th>Delphi Round</th>
<th>Number of Invitations Send</th>
<th>Number of Consent Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Round 2</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

7.4.6.1. Demographic details

The stakeholders, who were invited to participate in this study, were selected purposively, as each one was involved in ECD on a daily basis. Although not always physically involved, they contributed to the development of children in the capacity in which they were employed. The stakeholders age ranged from 20 to 60 years of age. The study was conducted nationally and internationally to get expert advice on the comprehensiveness of the SHISC. The professions of the stakeholders were as follows: Professor, Doctor of Psychology (n=2); principals in primary schools (n=1); teachers (n=7); social workers (n=1); early childhood practitioner (n=2); health promoter in schools (n=1); school governing body (n=1); nurse (n=2). The demographic information of the participants are listed below in Table 7.3, which shows that the more females (75%) than males (25%) participated in this study. Coloureds were the majority (81.3%), followed by African’s (12.5%) and Indian/Asian (6.5%). The age of the youngest participant fell in the 20-30 age category, with the oldest in the 50-60 category. More Christians (93.8%) than any other religious group participated in this study. The stakeholders for this study consisted mostly of teachers/educators (41.2%).

7.4.6.2. Quantitative findings for round 2

For Section 2 of the questionnaire, stakeholders were asked to rate each question on a 5-point Likert scale, with 1= strongly disagree and 4= not applicable. The responses of the stakeholders were rated from 3= agree to 4= strongly agree.
Table 7.3: Demographic information (n=17)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequencies</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Coloured</td>
<td>13</td>
<td>81.3</td>
</tr>
<tr>
<td>Indian/Asian</td>
<td>1</td>
<td>6.3</td>
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<tr>
<td>White</td>
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<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>30-40</td>
<td>6</td>
<td>37.5</td>
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<td>50-60</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Religion</strong></td>
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<td></td>
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<tr>
<td>Hinduism</td>
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<td>0</td>
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<tr>
<td>Judaism</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Islam</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>Christian</td>
<td>15</td>
<td>93.8</td>
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<tr>
<td>Other</td>
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<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
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<tr>
<td>Teacher/Educator</td>
<td>7</td>
<td>41.2</td>
</tr>
<tr>
<td>Social Worker</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Prof/Dr/ Counsellor</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Health Promotion Officer</td>
<td>1</td>
<td>5.9</td>
</tr>
<tr>
<td>Principal</td>
<td>1</td>
<td>5.9</td>
</tr>
<tr>
<td>Nurse</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Early Childhood Practitioner</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 7.4: Effectiveness of a SHISC for a South African context

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mode</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>The SCHISC is user friendly for primary schools in South Africa?</td>
<td>17</td>
<td>3.41</td>
<td>.51</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>The SHISC is useful for a primary school setting.</td>
<td>17</td>
<td>3.41</td>
<td>.51</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>The language in the SHISC is understood by teachers.</td>
<td>17</td>
<td>3.41</td>
<td>.51</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>The SHISC is a useful tool which teachers/educators can use to assess learners with psycho-social health and well-being challenges.</td>
<td>17</td>
<td>3.47</td>
<td>.51</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>The SHISC focus on the psychosocial health and well-being of learners in general.</td>
<td>17</td>
<td>3.41</td>
<td>.51</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>The SHISC can be easily implemented in primary schools in South Africa</td>
<td>17</td>
<td>3.59</td>
<td>.51</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>The SHISC provide teachers with a clear understanding of psychosocial health and well-being.</td>
<td>17</td>
<td>3.59</td>
<td>.51</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Participants responded on a 5-point Likert Scale
1= strongly disagree; 2=disagree; 3=agree; 4=strongly agree; 5= not applicable

Consensus on the questionnaire was met because the votes of the respondents fell within agree to strongly agree range, which indicated that the SCHISC was very effective. All statements received mean scores between 3.3 to 3.5, which also indicated that the stakeholders considered the SHISC highly effective (Table 7.4). While assessing the School Health Index Score Card among experts in the field, the results presented in Table 7.4 suggest that the experts considered the score card to be user friendly ($\text{M}= 3.41; \text{SD}= .51$), a useful tool in a primary school setting ($\text{M}= 3.41; \text{SD}= .51$), in a language that teachers understood ($\text{M}= 3.41; \text{SD}= .51$) and useful to assess the psycho-social health and well-being challenges of learners ($\text{M}= 3.47; \text{SD}= .51$). The panel of experts also agreed that the score card focused on the psycho-social health and well-being challenges of learners, in general ($\text{M}= 3.41; \text{SD}= .51$), and that, in the South African context, it would be easy to implement in primary schools and has a clear understanding of psycho-social health and well-being for teachers ($\text{M}= 3.41; \text{SD}= .51$).

7.4.6.3. Qualitative findings of Round 2

As indicated in Table 7.5, qualitative data obtained from all stakeholders for
section 3 of the questionnaire were captured and presented in a table format. Stakeholders were asked to share any suggestions and/or concern that they may have regarding the content and overall structure of the SHISC. The stakeholders provided comments for the researcher to consider – information that would contribute to the design of the SHISC. Four themes emerged from the results obtained during Round 2 of the Delphi. Consensus was reached on all components, following the input from the stakeholders, who accepted the invitation to participate. The researcher informed all stakeholders that consensus was reached at the end of Round 2, and thanked all the stakeholders for their willingness to participate and their invaluable contributions.

Table 7.5: Themes and Comments by Stakeholders

<table>
<thead>
<tr>
<th>Questions</th>
<th>Theme</th>
<th>Comments by Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>What would you change concerning the content of the School Health Index Score Card?</td>
<td>Content</td>
<td>The sub-components seem to be sufficient and taps into a range of aspects of health and well-being.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At this moment there’s no need for changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policies need to be written and accepted, but mostly implemented to measure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nothing at this moment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policies not available, would be great to have one.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No changes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policies of our school is clear and understandable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t think that I will change anything, as the questions are clear and logical.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I think it’s a very good tool for teachers and schools to assess learners. Schools can also use the score card to guide them in policy making regarding psychosocial needs of children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The content is easy to understand and address all domains of the child.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>That is should be in other languages as well because our school is multi-cultural.</td>
</tr>
<tr>
<td>What would you remove concerning the content of the school health index score card?</td>
<td>Remove</td>
<td>Nothing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I would not remove anything.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nothing at this point, as all topics concerning the child are covered.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nothing, I think its clear and user friendly.</td>
</tr>
<tr>
<td>What would you add concerning the content of the school health index score card?</td>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Input of learners. All previous illnesses, prevention and doctor details/GP, contact numbers of parents. I will add more parenting involvement. In this section “community support”, I would like to add also support for parents – identify families with problems (e.g. violence) because it affects children’s well-being and life quality very much. Will make one more aware of the barriers of development of children, which can be so easily be overlooked More time with the learner needed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What would you recommend concerning the overall structure of the school health index score card?</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>There should be an instruction to the assessor or teacher on how to fill in the questions. Also, there should be opening instruction to each sub-component. For example, the first section should read: Please indicate if there’s structures or mechanisms on Psychosocial education for teachers on: also please put response category headings in each sub-component it reads better and the assessor won’t get confused. Nothing at this moment. It should be functional/working document that is passed to all stakeholders. That the school should have one, because the school is still new and there is not a policy yet. Health Index Score Card should be more implemented on High schools, because learners has a lot of stressors at home. That you don’t say add a tick but rather let people rate it concerning numbers. Contact numbers of parents. To be used consistently.</td>
<td></td>
</tr>
</tbody>
</table>

### 7.5. Advantages and Disadvantages of a Delphi Study

According to Lang (1995, p. 3), an advantage of a Delphi is that it is a flexible process and is built on four basic features (1) structured questioning, (2) iteration [for example, the feedback process], (3) controlled feedback [for example, reducing the effect of noise-communication, which occurs in a group process that both distorts the data and deals with group and/or individual interest, rather than focusing on problem solving] and (4) anonymity of responses [for example, reducing the effects of individuals that are often dominant, when using a group-based process to collect and synthesize information] (Dalkey & Rourke, 1972). Additionally, information can be gathered from a geographically diverse panel of participants, which allow panellists anonymity, as well as time to carefully consider their responses, before replying (Adams & O’Brien, 2004; Garrod, 2004; Gordon, 1994). The Delphi technique is a widely accepted method for data collection from experts within a
particular field.

However, conducting a Delphi can be very time-consuming, especially when the instrument used for the Delphi consists of a questionnaire with a large number of statements/questions that will be onerous for the participants to complete. According to Ludwig (1994, p. 54), “a drawback to Delphi was that the questionnaire method may slow the process greatly, as several days, or weeks, may pass between rounds”. “More specifically, since developing the instrument, collecting the data, and administering the questionnaire are interconnected between iterations, ensuring Delphi subjects respond to the investigators on time, does in many ways either promote or prohibit the ability of the investigators in analyzing the data, developing a new instrument based upon the prior responses, and distributing subsequent questionnaires in a timely fashion. These are challenging aspects of conducting a Delphi study and do require proper planning and management” (Hsu & Sanford, 2007, p. 4).

7.6. Changes to the SHISC

The following findings and changes concerning the School Health Index Score Card was indicated by the various stakeholders after the successful implementation of the Delphi study. These changes serve to improve the comprehensiveness, effectiveness and user friendliness of the SHISC for schools.

Firstly, the SHISC should be translated into different languages, so that the instrument could be used, not only in South Africa, but also in other countries. Secondly, the SHISC must serve as a working document that can be passed on from primary school to secondary school. An indication was given from one of the stakeholders that the SHISC will also be beneficial in secondary schools, as learners at secondary schools, experience more stressors than learners on a primary school level. Thirdly, support for parents, as well as more parental and community involvement must be added to the SHISC. Fourthly, the SHISC must be able to identify children, who are affected by family problems (for example, neglect, abuse, violence), as these factors could affect the psychosocial health and well-being, as well as quality of life of children. Fifthly, instruction to the assessor or teacher/educator on how to complete the SHISC must be clear, with an opening instruction to each sub-
component. Lastly, the first section of the SHISC needs to be revised for simplicity of reading (for example, please indicate if there are structures or mechanisms on Psychosocial Education for teachers); the response category headings must be found in each sub-component, the psychosocial health and well-being of learners must be rated according to numbers, not by a mark (tick mark), as indicated in the instructions and the contact details of the parents must be included, as well as previous illnesses of learners.

The stakeholders further commented that the SHISC is a very good instrument for teachers/educators and schools to assess learners. The implementation of the SHISC could serve as a guide for policy-making, regarding the psychosocial health and well-being of learners. According to the stakeholders, the SHISC is a comprehensive tool that should be used consistently and should serve as a learner profile of learners, which can be passed on from one grade to another, or from primary to secondary school. The effectiveness of the SHISC, therefore, is evident in the results, as conveyed by the stakeholders.

### 7.7. Main Findings concerning the SHISC

A recent study on the implementation of school health initiatives reveals that there is a lack of support by managers, which is a obstacle to the successful implementation of these initiatives (Mohlabi & Van Aswegen, 2010). However, results from this current study indicate that the participants believed that the implementation of the SHISC would be successful, if it could be implemented in all phases of development, and not in the early childhood phase only.

The SHISC was designed with a particular focus on children, who live in the rural areas of South Africa, and who experience different psychosocial health and well-being challenges at school, home and their community. Children living in rural areas are often faced with poverty, the burden of HIV/AIDS, child headed households, poor nutrition, poor basic sanitation and water services, as well as overcrowded homes, which studies reveal, affect the optimal development of children in early childhood.

The participants also expressed their view of the effectiveness of the SHISC, which could be a substitute for the journals that they are currently using to record the development of children, regarding their psychosocial health and well-being. According to the participants, there are health policies available that do not take the psychosocial health and well-being of
children into consideration, as clearly indicated by the SHISC. The participants also expressed their view regarding the simplicity of the language used in the design of the SHISC. They expressed that the lack of a tool to assess children impedesthem, as they can only find time to write a few sentences in their journals regarding the psychosocial health and well-being challenges of children.

They emphasize that the SHISC would reduce their stress levels and give a clear indication of where children need to be referred. The participants agreed with the structure of the SHISC (for example, the name and surname of the learner, grade, educator, name of school, date of entry). The overriding opinion was that this information was very important and would make it easier to track learners across phases.

In addition, the participants were of the opinion that the SHISC should be sent to the home of learners on a daily basis for their parents to assess their children, and to return the SHISC to the school via the learners. The participants stated that they daily encountered children with emotional behavioural challenges, but that they have no tool to assess these children. They also expressed that the SHISC should be implemented across all subject learning areas, and not only the Life Orientation curriculum, where children are taught health education.

Presently, most recordkeeping for each child is done in journals, designed by the teachers, which is time consuming, as there is no other tool available to assess children. The participants also highlighted that children do not receive regular visits by the school nurse. They are aware that there is a school nurse available for schools, but the schools are being visited only twice-a-year, as these schools are in remote and rural area of TWK region.

The participants embraced the effectiveness of the SHISC and its implementation across all subject areas, which should be a communal effort. Everyone involved in the development of children should participate in the implementation of the SHISC, which will result in all children being successfully assessed and referred to the necessary services. Although schools are ideal settings for the implementation of the SHISC, the parents/caregivers and the community also play an integral part in ensuring that children develop to their fullest potential possible. The goal of implementing the SHISC is to prevent
learners from experiencing psychosocial health and well-being challenges, which could hinder optimal development in the early phase of their lives.

7.8. Conclusion

Expert opinion and input concerning the design and implementation of the School Health Index Score Card that assesses psychosocial health and well-being of learners in Early Childhood Development at schools was gathered through the use of the Delphi study. The use of the Delphi study allowed the stakeholders, who are experts in ECD and health promotion, to make contributions to the success of the design of The School Health Index Score Card for the South African context. This current study has effectively revealed that there is an urgent need for psychosocial health and well-being indicators in school health policies that would ease the burden of educators, to make an effective identification and assessment, to refer children for services, according to their psychosocial health and well-being challenges.

7.9 Recommendations

Core recommendations by the experts concerning the content and structure of the SHISC were that “all topics concerning the child was covered” and that the SHISC was a “very good tool for teachers and schools to assess learners. Schools can also use the score card to guide them in policy making regarding psychosocial needs of children”.

Supplementary recommendations concerning the content and structure of the SHISC were as follows: “policies need to be written and accepted, but mostly implemented to measure”; “it should be a functional/working document that is passed to all stakeholders”; “I would like to add also support for parents-identify families with problems (e.g. violence) because it affects children well-being and life quality very much”.

Additionally, core recommendations concerning the content of the SHISC were as follows: “its clear and userfriendly”; “I don’t think that I will change anything, as the questions is clear and logical”; “subcomponents seem to be sufficient and taps into a range of aspects of health and well-being”; “content is easy to understand and address all domains of the child”; and “will make one aware of the barriers of development of children which can so easily be overlooked”.

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The feedback from the various experts gave a clear understanding of the feasibility to implement the SHISC in primary schools. However, the SHISC needed to be re-designed due to the demographics of the learner. Experts recommended that “it should be in other languages, as well, because schools are multi-cultural”; as well as “all previous illnesses, prevention and doctor details/GP, contact numbers of parents” should be added to the SHISC.

Another recommendation was that “there should be an instruction to the assessor, or teacher, on how to fill in the questions. Also there should be an opening instruction to each sub-component. For example the first section should read: ‘Please indicate if there are structures, or mechanisms, on Psychosocial Education for teachers on: Also please put response category headings in each sub-component, it reads better and the assessor won’t get confused’.”
CHAPTER EIGHT

EXECUTIVE SUMMARY & CONCLUSION

8.1. Introduction

The main aim of this study was to design a School Health Index Score Card (SHISC) that assesses the psychosocial health and well-being of learners in Early Childhood Development (ECD) at primary schools. This study applied a mixed method sequential explanatory design (quantitative phase followed-up by qualitative phase) which allowed for the integration of the findings by answering the objectives of the study. The study was conceptualized using the PAR approach, deemed appropriate for the research and consisted of the following phases: (1) Identifying the problem through a baseline needs assessment (stage 1) and a systematic literature review (stage 2); (2) Action planning through the design of a School Health Index Score Card that assesses psychosocial health and well-being of learners in early childhood development (stage 1) and evaluating the feasibility of the designed school health index score card through a Delphi study with experts in ECD (stage 2). According to Räihä et al., (2013), each phase of the PAR cycle always serves as the foundation for the next one, and the purpose is to continuously develop operations and understandings of these operations. This chapter provides a platform for discussing the results, according to the different phases. The findings that are discussed are aligned with the aims and objectives of the study, as outlined in the thesis, as well as the conceptual framework as discussed in Chapter 2. This chapter provides more insight into the effectiveness of the SHISC for children in ECD.

8.2. Psychosocial Theory of Development and School Well-being model

The conceptual framework underlying this thesis was derived from the psychosocial development theory of Erik Erikson (1959) and literature on child development, as well as the School Well-being model by Konu and Rimpelä (2002) that emphasizes the developmental primacy of social relationships and psychosocial health and well-being of children across multiple contexts (e.g. parents/primary caregivers, schools, communities). Both illustrate how family, school and community jointly influence the early development of children. Although there is an abundance of research, which demonstrates
that the early years are pivotal for healthy, positive and optimal child development, in order for children to experience optimal development, it is crucial that their basic needs, such as their physical, emotional, social, cognitive, spiritual and psychological needs, are met in the early phases of their life (Shonkoff & Phillips, 2000; Hertzman & Power, 2006).

Roman (2008) adds that an individual can develop to his/her fullest potential when his/her needs are fulfilled, or satisfied. Additionally, the development of a child is, therefore, characterized by the process of individual growth, change and transformation, and is frequently conceptualised in terms of moving through a sequence of age-approximate stages (Vogler, Crivello & Woodhead, 2008; Latouf, 2008). Irwin et al. (2007) highlights that the initial experiences of a child, therefore, form the foundation for subsequent learning in later life stages, with ECD being the most critical foundation phase of ultimate growth and development. Erikson (1959) characterized ECD as a period of personal growth and development, which stresses the interaction between the person and his/her physical and social environments (Reber & Reber, 2001, in Brink, 2006, p.59). Akinsola (2011) asserts that children receive learning inside and outside of the familial home, with parents and primary caregivers playing a crucial part in providing children with learning opportunities at home. However, Richter (2004) adds that the most intimate level of the child’s development starts with the family, and at a broader level, the residential communities (such as neighbourhoods), the relational communities (such as those based on religious, or other social bonds) and the early childhood service environments.

According to Konu and Rimpelä (2002), the variety of interacting and interdependent domains of influence is instrumental in the early phases of the lives of children, as is the impact of the child's surroundings, as well as how these surroundings add to or prevent children from developing to their fullest potential. However, the basic education of a child to develop to his/her full potential is influenced by where s/he lives, and the impact of his/her surroundings should, therefore, not be underestimated.

The School Well-being Model examines the impact of the learning environments on the psychosocial health and well-being of learners in early childhood. The aim of the study was to design a school health index score card that assesses psychosocial health and well-being in
ECD. The study was conducted in two phases, with two stages each, as discussed in the following sections.

8.3. Phase 1: Identifying the problem

8.3.1. Stage 1: Baseline Assessment

Although the familial home is primary in providing children with a nurturing environment, schools play a pivotal role and have the responsibility of creating a secure and safe environment for children in their care, assuring parents/primary caregivers that their children will be protected from harm. When considering the assumptions of the Psychosocial Theory of Development and the School Well-Being Model, understanding the problem, as it relates to the psychosocial health and well-being of learners in ECD at primary schools, and how the environment can add to, or hinder, the development of children, becomes plain.

The results of this study reveal that parents/primary caregivers perceive problems related to psychosocial health and well-being, namely, school problems, social problems and physical problems, as the most important problems that children experience at schools. This result clearly shows that children, living in the rural areas of South Africa, are often challenged by the surroundings in which they live, making it difficult for children to thrive and develop optimally. Similarly, the results reveal the teacher’s perceptions of problems related to psychosocial health and well-being as social behavioral, hyperactive behavioral and behavioral problems that children tend to experience in school. These findings are similar to a study conducted by Ståhl (2012), who highlights that environmental and personal factors belong to the complex context of the child’s life, and, as such, have an effect on the child’s ability to function. According to Grantham-McGregor et al. (2007), children growing up with inadequate resources, as those living in poverty, show lower levels of intellectual functioning and higher levels of emotional and behavioural impairments. It can, therefore, be concluded that the socio-economic environment in which children live can add to, or hinder, optimal development of children.

Additionally, literature indicate that the living conditions of children and their families
are shaped and influenced by their environment – political, socio-economic and cultural circumstances (Lake & Reynolds, 2011). A fundamental basic human right, according to the South African Constitution (1996), is for all children, living and growing up in different socio-economic backgrounds in a democratic society, to feel safe and secure in their environment. However, although children spend most of their childhood at school, they are not free of the different barriers that could hinder their development. The rights of children at school are further protected by the South African National Education Policy (South Africa, Department of Education [DoE], 1995b). The question that arises is, ‘How children are protected at school?’ The results of this study also indicate that the role of teachers in the lives of children is important for the psychosocial health and well-being of learners.

8.3.1.1. Counselling and Support Services

The findings of teachers in South African schools show that learners and their parents/primary caregivers are supported in ways that meet the needs of learners. The results show that schools provide learners and their parents/primary caregivers with counselling and support services, made available through the different policies and structures available at school. The type of support learners require is determined and stipulated in the Screening, Identification, Assessment and Support [SIAS] (South Africa, Department of Basic Education [DoBE], 2014, p. 8 [11 a, b, c])

8.3.1.2. Bullying

When teachers were ask about the policies that protect children against bullying, they stated that children were well informed about how to report such incidences. Teachers also indicated that schools have policies and programmes in place for children who are victims of been bullied at school. The results of the current study indicates further that schools have integrated programmes in classrooms that make children aware of the negative impact on the life of a child.

The findings of this study is similar to a study conducted by Mncube and Harber (2013) on bullying, during 2003 and 2005, which reveals that, in developing countries, between one fifth and two thirds of children reported being bullied during a preceding 30-day period. The same study revealed that nearly a quarter
of seven million learners, who were questioned in Spain, and a third of those surveyed in Australia, reported that learners were being bullied by classmates.

8.3.1.3. Corporal Punishment

Mncube and Harber (2013) assert that a child, who comes from a home where physical punishment does not exist, is exposed to physical punishment for the first time in school, with corporal punishment being widely spread in rural areas of South Africa (Nelson Mandela Foundation, 2005, p. 17). The United Nations Committee on the Rights of the Child (2006), adopted General Comment No.8, which stipulates that a child has the right to be protected from corporal punishment and other cruel, or degrading, forms of punishment. The results of this study show that teachers identified the use of corporal punishment as a criminal offence and were aware that any kind of abuse against a learner is prohibited, as corporal punishment was officially banned from countries like South Africa and China (PLAN, 2008, p. 12).

Although there is no evidence to prove that corporal punishment improves behaviour, or academic achievement, and contributes to school drop-out rate, other studies reveal that a vast amount of evidence exists on the harmful effects of corporal punishment, such as physical harm, increases anxiety, fear or resentment in class, and in certain instances, even death (PLAN, 2008; Humphreys, 2006; Teeka-Bhattarai, 2006).

8.3.2. Stage 2: Systematic Review

A systematic review was conducted as the second stage of phase one. The aim of this review was to examine the variety of existing, valid and reliable instruments that assess psychosocial health and well-being in ECD. The review focused on studies conducted internationally and nationally. The results of this review reveal that instruments are often designed to identify physical ailments, the person’s ability to adjust to particular situations, psychiatric diagnosis, educational and intellectual abilities, as well as the personal characteristics of children over their entire lifespan.
The finding of this review is similar to that of a study done on instruments used to assess child and youth well-being in child welfare practices (Lou, Anthony, Stone, Vu & Austin, 2006). This study of Lou et al. (2006) reveals that the well-being of children is not merely the product of the internal characteristics of the child, but focuses on the interaction between the child and his/her environment. For example, the current qualities of the child-rearing environment appear to be negatively associated with internalizing (depression, anxiety, social anxiety) behavioural problems in children (Zijlstra, Kalverboer, Post, Ten Brummelaar & Knorth 2013). According to Zijlstra et al. (2013), a high quality environment will aid children to thrive. Additionally, this review revealed that the promotion of psychosocial health and well-being in early development will promote positive child development outcomes in later life. However, the early detection of psychosocial health and well-being challenges, during the early development phases, could be considered a form of prevention, as it will detect any impediments experienced by children. The primary goal for using instruments that assess the psychosocial health and well-being challenges of children is to implement preventative measures that will act as a buffer against any disorders. The instruments included in this review are merely examples of available instruments that measure psychosocial health and well-being over a broad domain of the child’s life and do not reflect a complete, or definite account of useful instruments.

The instruments, as indicated in Chapter 6, were selected because they had commonly been used in both research and clinical practice, and were deemed reliable and valid, as well as feasible for use in schools (Levitt, Saka, Romanelli & Hoagwood, 2007). Additionally, the selection of appropriate psychosocial health and well-being assessment instruments depended on specific factors, such as the age of children to be assessed. For example, the reports from teachers in this study indicated that children, who experienced socio-emotional problems, were more prone to withdraw, which could leave them socially challenged in adolescence (Honkanen et al., 2014). Besides, studies indicate that parents/primary caregivers and teachers are typically the best observers and reporters of behaviour in childhood (Levitt et al., 2007).

A study conducted by Levitt et al., (2007) reveals that psychosocial health and well-being challenges in schools could be identified early by training teachers, who will be
able to identify these challenges, as teachers are already well integrated into the school system. The results of this review also suggest that the use of valid and reliable instruments to assess psychosocial health and well-being in schools could have a number of advantages for children in multiple contexts, as described in the Psychosocial Theory of Development of Erikson (1959) and the School Well-being Model, developed by Konu and Rimpelä (2002).

8.4. Phase 2: Action Planning

8.4.1. Stage 1: Designing a School Health Index Score Card that assesses psychosocial health and well-being of learners in ECD.

The School Health Index Score Card was designed based on the findings of the needs assessment and the systematic review that was conducted with the parent/primary caregivers and teachers of children in ECD (see Chapter 4, Chapter 5 and Chapter 6).

8.4.2. Stage 2: Evaluating the feasibility of the drafted SHISC through a Delphi study with experts in ECD and Delphi technique

The importance of PAR is to establish the feasibility of the drafted SHISC by obtaining feedback from a panel of experts in ECD. The Delphi method provided the experts with an opportunity to express their opinions and expertise concerning the overall structure and content of the SHISC which focuses on the psychosocial health and well-being of children in ECD in multiple contexts, namely family, schools and community.

The Delphi process allowed experts to reach consensus on all aspects of the SHISC, without the decision-making process being influenced by each other. Consensus on the SHISC was reached, as the votes of the participant’s concerning questions pertaining to the overall structure and content, fell in the ‘agree to strongly agree’ range, which indicated that the SHISC was very effective. All statements received for this study had mean scores between 3.3 to 3.5, which indicated that the experts considered the SHISC to be highly effective. A study conducted by Miller (2006) reveals that consensus on a topic can be reached, when a certain percentage of the votes fall within a prescribed range, which was the case with this study.

The findings of this phase showed that the proposed School Health Index Score Card
was a useful tool to assess psychosocial health and well-being of learners in Early Childhood Development, in a South African context. However, the implementation of the SHISC would require teachers to take ownership of it, to assess children in the early phases of their lives, taking into consideration environmental factors that play an important role, contributing to the psychosocial health and well-being of children.

8.5. Limitations of the Study

The researcher had limited time to conduct the study as it was done during the first school semester, when learners were busy with examinations, which made it very difficult for educators to focus solely on the research. The study was conducted in a rural area of the Western Cape (not in an urban area), where Afrikaans was the dominant language spoken. Although there are numerous support systems available for children and their parents/primary givers at schools, the efficacy of these support systems was questionable with regards to the implementation thereof. The ideal stimulating environment for such disadvantaged children was also not conclusive in the literature. Research in South Africa should, to a certain extent, focus on designing valid and standardized instruments that apply to the diverse population, especially the measurement of psychosocial health and well-being of children. The process of data collection was a challenge because the parents/primary caregivers of learners preferred to have the questionnaires sent to their homes, for them to complete, which, obviously, was more convenient for them; however, the reliability of the information on the questionnaire could be suspect, as the questionnaire could have been completed by any of the other family members.

8.6. Conclusion

Children’s psychosocial health and well-being are best supported by parents/primary caregivers, teachers and their relational/residential environment. The evidence clearly shows that the environment, in which children are raised, could contribute to, or limit, the opportunities that abound in a nurturing and stimulating environment, from birth, into childhood, and later adulthood.
This chapter described the final outcomes of this current study, which highlight the major contributions of the participants, providing a clear understanding of the problem under study, as well as the feasibility of implementing the proposed SHISC at primary schools. Valuable contributions on the content and structure of the proposed SHISC were offered by various participants, who deemed it necessary to implement the SHISC as an assessment tool for psychosocial health and well-being in Early Childhood Development at primary schools.

Whether the SHISC will accomplish its purpose, therefore, will have to be evaluated by monitoring the extent to which it will create awareness and opportunities for issues that reflect the primary concern of the psychosocial health and well-being of children in Early Childhood Development. In addition, what remains undetermined is the extent to which the SHISC could achieve its promise of provoking action in schools and communities, and whether these actions would benefit the psychosocial health and well-being of children in a multiple context.

8.7. Recommendations

As South Africa has limited research regarding instruments that measure psychosocial health and well-being in Early Childhood Development, it is crucial that more studies be conducted to explore the effectiveness of the use of such instruments. School health promotion policies should be invested in Early Childhood Development and should consider the socioeconomic background of all children. Similarly, these policies need to emphasize the importance of psychosocial health and well-being in Early Childhood Development by focusing on the child, family, school and the community where a child lives and develops.

To improve and achieve the psychosocial health and well-being of children in ECD overall, it is important that professionals should be supported to improve the quality of their work with children and families. Various forms of support includes training, quality assurance and reflective practice, providing high quality evidence-based universal services and to target interventions that focus on removing or narrowing gaps for particular groups of children. The
vision is that all children living in disadvantage and rural areas in South Africa thrive and look forward with confidence to the future. Measures that could be taken that influence policies that would provide children in disadvantage are as follows:

- To foster and build strong parent-child relationships, positive parenting that results in improved psychosocial health and well-being
- Care and protection to keep children healthy and safe
- The prevention and cure of serious and communicable diseases
- Readiness for school and increased learning
- Early detection of and actions to address developmental delay, abnormalities and ill health
- Identification of factors that could influence the psychosocial health and well-being in families
- Better short and long term outcomes for children who are at risk of social exclusion
- To identify the inter-relationship between disparities in health, childhood development and education, employment, the social and physical environment

Policymakers need objective, measurable and comparable quality indicators for psychosocial health and well-being, as an investment for children, not only in Early Childhood Development, but across their entire life span. It is clear from the results of this study that the SHISC is a useful tool to execute psychosocial health and well-being assessments and will contribute to the overall comprehensiveness of reports given by the teachers to the parents of children.

Implementation of the SHISC will enable the teacher to trace the child’s psychosocial and well-being challenges over a period of time, which will identify the services needed in order to aid the child during the early development phases. The implementation of the SHISC will also serve as a guide to understand the strengths or weakness of school policies and practice, by developing an action plan that could lead to an improvement of the overall policies, should
there be any weaknesses.

Given the diversity of socioeconomic disparities, cultural beliefs, traditions and values, the researcher trusts that this study has highlighted the need for more studies on the importance of psychosocial health and well-being of children in Early Childhood Development in South Africa.
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APPENDICES

Appendix 1: Letter from Senate Research committee
05 March 2013

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and ethics of the following research project by:
Prof C Schenck (Social Work)

<table>
<thead>
<tr>
<th>Research Project:</th>
<th>Building capacity for sustainable development at rural service learning sites.</th>
</tr>
</thead>
</table>

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape
Appendix 2: WCED Research Approval Letter

REFERENCE: 20130605-12249
ENQUIRIES: Dr A T Wyngaard

Mr Gerard Filies / Ms Karin Daniels
Faculty of Community & Health Sciences Interdisciplinary
Teaching and Learning Unit
UWC
Private Bag X 17, Bellville, 7535

Dear Mr Gerard Filies / Ms Karin Daniels

RESEARCH PROPOSAL: BUILDING CAPACITY FOR SUSTAINABLE DEVELOPMENT AT RURAL SERVICE-LEARNING SITES

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

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Approval for projects should be conveyed to the District Director of the schools where the project will be conducted.
5. Educators’ programmes are not to be interrupted.
6. The Study is to be conducted from 15 July 2013 till 20 September 2014.
7. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
8. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
9. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
10. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
11. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
12. The Department receives a copy of the completed report/dissertation/thesis addressed to:

   The Director: Research Services
   Western Cape Education Department
   Private Bag X9114, CAPE TOWN, 8000

We wish you success in your research.

Kind regards.
Signed: Dr Audrey T Wyngaard

Directorate: Research
DATE: 05 June 2013
Appendix 3: Information Sheet/Letter

UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: 076 573 8386
E-mail: daniels.karin8@gmail.com

INFORMATION SHEET

Project Title: Health promotion: The design, implementation and evaluation of a school health index score card that assesses psychosocial health and well-being in early childhood development in schools

What is this study about?
This is a research project being conducted by Karin Daniels at the University of the Western Cape. We are inviting you to voluntarily participate in this research project because you are a parent, carer, teacher, principal, school governing member, a school psychologist, nurse an expert in the field of Early Childhood Development. The purpose of this study is to understand if the school/s is ready for the implementation of the School Health Index Score Card as part of the overall curriculum and not only the Life Orientation module.

What will I be asked to do if I agree to participate?
You will be asked to complete a questionnaire and your expert opinion on the content of the school health index score card on a 5 point Likert scale that range from 1- strongly disagree to 5 – not applicable. This questionnaire will ask you questions about the CONTENT:

- The user friendliness, usefulness, language appropriateness and the effectiveness of the implementation of the school health index score card etc.

This questionnaire will be completed online and will take approximately 15 minutes to complete.
Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, the information you provide will be totally private; no names will be used so there is no way that you can be identified as a participant in this study. The information will be treated with anonymity and confidentiality. Your name will not be reflected on the questionnaire. The information obtained from the survey will be collated with the information from other completed surveys. Therefore there will be no way to connect you to the survey questionnaire.

What are the risks of this research?

There are no known risks in participating in the study.

What are the benefits of this research?

This research will help the school/s to make preparations or changes needed for the school health programme to be a success. If the school health programme is a success then the learners and the school community will benefit.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part in the study. If you decide to participate in this research study, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

Is any assistance available if I am negatively affected by participating in this study?

Every effort has been taken to protect you from any harm in this study. If however, you may feel affected you can be referred to your nearest community resource for assistance.

What if I have questions?

This research is being conducted by Karin Daniels in the Social Work Department at the University of the Western Cape. If you have any questions about the research study itself, please contact the study co-ordinator: Professor Roman at: 021 9592277/2970 or email:
nroman@uwc.ac.za.

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Professor Jose Frantz – Dean of the Faculty of Community and Health Sciences

Tel No: 021 959 2631/2746

Email address: jfrantz@uwc.ac.za

This research has been approved by the University of the Western Cape’s Senate Research Committee and Ethics Committee.
CONSENT FORM FOR SCHOOL PRINCIPALS

Title of Research Project: Health promotion: The design of a school health index score card that assesses psychosocial health and well-being in early childhood development in primary schools

The study has been described to me in a language that I understand and voluntarily agree to participate

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<thead>
<tr>
<th>Name</th>
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<td>Signature</td>
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<tr>
<td>Witness</td>
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<td>Date</td>
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</table>

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Professor Nicolette Roman

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: 021 959 2277/2970
Appendix 5: Consent form for School Governing Body members

CONSENT FORM FOR SCHOOL GOVERNING BODY MEMBERS

Title of Research Project: Health promotion: The design of a school health index score card that assesses psychosocial health and well-being in early childhood development in primary schools.

The study has been described to me in a language that I understand and voluntarily agree to participate.

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<th>Witness</th>
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Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Professor Nicolette Roman

University of the Western Cape

Private Bag X17, Belville 7535
Appendix 6: Consent form for Parents/Primary caregivers

CONSENT FORM FOR PARENTS/PRIMARY CAREGIVERS

Title of Research Project: Health promotion: The design of a school health index score card that assesses psychosocial health and well-being in early childhood development in primary schools

The study has been described to me in a language that I understand and I freely and voluntarily agree to allow my child to participate in the study. My questions about the study have been answered. I understand that my child’s identity will not be disclosed and that my child may withdraw from the study without giving a reason at any time and this will not negatively affect my child in any way.

<table>
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<tr>
<th>Parent’s name</th>
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<td>Parent’s signature</td>
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<td>Witness</td>
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<td>Date</td>
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Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Dr N Roman
CONSENT FORM FOR SCHOOL TEACHERS

Title of Research Project: Health promotion: The design of a school health index score card that assesses psychosocial health and well-being in early childhood development in primary schools

The study has been described to me in a language that I understand and voluntarily agree to participate

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Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator’s Name: Professor Nicolette Roman

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: 021 959 2277/2970

Email: nroman@uwc.ac.za
Appendix 8: Quantitative Data Collection Questionnaire

Section A: Demographic information (10 JUNE 2014)

Please complete the following by marking the correct response.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td>Age</td>
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<tr>
<td>Grade</td>
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</table>

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<thead>
<tr>
<th>Race</th>
<th>Coloured</th>
<th>Black African</th>
<th>White</th>
<th>Indian/Asian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home language</td>
<td>Afrikaans</td>
<td>English</td>
<td>isiXhosa</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Do you live with your...</td>
<td>Mother &amp; Father</td>
<td>Mother</td>
<td>Father</td>
<td>Caregiver</td>
<td>Grandparent</td>
</tr>
</tbody>
</table>

Section B: Pediatric Quality of Life Inventory (PedsQL) questionnaire, for parents and/or caregivers of primary school children.

Please answer the following questionnaire by making a (X) in the space provided. Answers range from Never - Always

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Never</th>
<th>Seldom</th>
<th>Often</th>
<th>Always</th>
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<tbody>
<tr>
<td></td>
<td><strong>Physical Functioning</strong></td>
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<tr>
<td>1</td>
<td>Does your child participate in sports activity or exercise at school?</td>
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<tr>
<td>2</td>
<td>Does your child take a bath or shower by him/herself?</td>
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<td>3</td>
<td>Does your child have low energy levels?</td>
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<td>4</td>
<td>Does your child do task around the house?</td>
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<tr>
<td></td>
<td><strong>Social functioning</strong></td>
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<tr>
<td>5</td>
<td>Does your child get along with other children at home?</td>
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</tr>
<tr>
<td>6</td>
<td>Does your child get along with other children at school?</td>
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<td>7</td>
<td>Does your child have problems with making friends at home?</td>
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<td>Question</td>
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<td>8</td>
<td>Does your child have problems with making friends at school?</td>
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<td>9</td>
<td>Does your child get teased by other children at home?</td>
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<tr>
<td>10</td>
<td>Does your child get teased by other children at school?</td>
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<tr>
<td>11</td>
<td>Does your child cope with daily functions (e.g. packing away of toys, picking up and throwing dirt in the dustbin) at home?</td>
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<td>12</td>
<td>Does your child cope with daily functions (e.g. cleaning of his/her desk, identifying different colours) at school?</td>
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<tr>
<td>13</td>
<td>Does your child easily get tired when playing games with other children at home?</td>
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<td></td>
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<tr>
<td>14</td>
<td>Does your child easily get tired when playing games with other children at school?</td>
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<tr>
<td>15</td>
<td>Does your child appear to listen at home?</td>
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<tr>
<td>16</td>
<td>Does your child appear to listen at school?</td>
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<tr>
<td>17</td>
<td>Does your child appear to pay attention at home?</td>
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<tr>
<td>18</td>
<td>Does your child appear to pay attention at school?</td>
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<td>19</td>
<td>Does your child complete chores (e.g. packing away toys, packing away his bag) at home?</td>
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<tr>
<td>20</td>
<td>Does your child complete the school work given in the classroom?</td>
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<td>21</td>
<td>Does your child complete school work given for homework?</td>
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<tr>
<td>22</td>
<td>Does your child feel afraid or scared at home?</td>
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<td></td>
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<tr>
<td>23</td>
<td>Does your child feel afraid at school?</td>
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<td>24</td>
<td>Does your child feel sad at home?</td>
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<td>25</td>
<td>Does your child feel sad at school?</td>
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<tr>
<td>26</td>
<td>Does your child feel angry at home?</td>
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<tr>
<td>27</td>
<td>Does your child feel angry at home school?</td>
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<tr>
<td>28</td>
<td>Does your child have trouble sleeping at night?</td>
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<tr>
<td>29</td>
<td>Does your child feel tired?</td>
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<td>30</td>
<td>Does your child feel restless?</td>
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<tr>
<td>31</td>
<td>Does your child seemto be worried about what will happen to him/her at home?</td>
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<tr>
<td>No.</td>
<td>Item</td>
<td>Not true</td>
<td>Somewhat true</td>
<td>True</td>
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<td>32</td>
<td>Does your child seem to be worried about what will happen to him/her at school?</td>
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<tr>
<td>33</td>
<td>Does your child pay attention in class?</td>
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<td>34</td>
<td>Does your child have the tendency to forget things (e.g. lunch, communication book) at home?</td>
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<td>35</td>
<td>Does your child have the tendency to forget things (e.g. clothes, lunchbox) at school?</td>
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<tr>
<td>36</td>
<td>Is your child absent from school because he/she is ill?</td>
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<td>37</td>
<td>Does your child stay absent from school to go to the doctor or hospital?</td>
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<tr>
<td>38</td>
<td>Does the school provide nutritional support to your child/ren?</td>
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<td>39</td>
<td>Does the school have a referral system for emergency cases for your child/ren?</td>
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<tr>
<td>40</td>
<td>Does the school provide safe and clean water for drinking, cooking and hand washing to the school population?</td>
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<tr>
<td>41</td>
<td>Does the school provide adequate and clean toilets for the school population?</td>
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<tr>
<td>42</td>
<td>Do the teachers discuss health problems of children with the parents/or caregivers?</td>
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<td></td>
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<tr>
<td>43</td>
<td>Does the school has emergency plans when children health is threatened by and epidemic outbreak, measles, worm infestation, lice, tuberculosis, meningitis, polio, diarrhoea, conjunctivitis, HIV/Aids?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Does the school allow provision for health screening?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>45</td>
<td>Does the school allow provision for basic oral services?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Does the school allow provision for immunisations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section C: Strengths and Difficulties Questionnaire for teachers, principals, social workers, school psychologist of primary school children.**

Please reflect on the children in your school by answering the following questions. Indicate your answer by making a (X) in the appropriate space. Answers range from **Not true- True**
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Do children have many worries (e.g. not having done his/her homework, someone will be there to fetch them from school)?</td>
</tr>
<tr>
<td>3</td>
<td>Do children often seem worried?</td>
</tr>
<tr>
<td>4</td>
<td>Do children often feel unhappy, depressed or tearful?</td>
</tr>
<tr>
<td>5</td>
<td>Do children seem nervous or clingy in a new situation?</td>
</tr>
<tr>
<td>6</td>
<td>Do children easily lose confidence?</td>
</tr>
<tr>
<td>7</td>
<td>Does the school help the parent to have positive attitudes about the child’s abilities at school?</td>
</tr>
<tr>
<td></td>
<td><strong>Peer Behavioural Problems</strong></td>
</tr>
<tr>
<td>8</td>
<td>Do children seem to be rather lonely?</td>
</tr>
<tr>
<td>9</td>
<td>Do children prefer to play alone?</td>
</tr>
<tr>
<td>10</td>
<td>Do children have at least one &quot;good friend&quot;?</td>
</tr>
<tr>
<td>11</td>
<td>Do children seem to be generally liked by other children?</td>
</tr>
<tr>
<td>12</td>
<td>Do children communicate better with adults than with other children?</td>
</tr>
<tr>
<td>13</td>
<td>Do children form part of being an active participant in the learning process (e.g. children doing oral presentations, having a chance to make simple drawings on the blackboard, recite poems)?</td>
</tr>
<tr>
<td></td>
<td><strong>Behavioural Problems</strong></td>
</tr>
<tr>
<td>14</td>
<td>Do children often become irritable by others?</td>
</tr>
<tr>
<td>15</td>
<td>Do children usually obey task (e.g. notifying teachers of any appointments during school times) given by his/her parents/caregivers?</td>
</tr>
<tr>
<td>16</td>
<td>Do children usually obey tasks (e.g. notifying parent/caregivers of school meetings) given by his/her teacher?</td>
</tr>
<tr>
<td>17</td>
<td>Do children often fight?</td>
</tr>
<tr>
<td>18</td>
<td>Do children often lie or cheat?</td>
</tr>
<tr>
<td>19</td>
<td>Are there children that steal at school?</td>
</tr>
<tr>
<td>20</td>
<td>Do children use physical violence against teachers?</td>
</tr>
<tr>
<td>21</td>
<td>Do children use verbal language against teachers?</td>
</tr>
<tr>
<td>22</td>
<td>Does the school actively discourage physical violence against children?</td>
</tr>
<tr>
<td></td>
<td>Question</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>23</td>
<td>Does the school actively discourage verbal violence amongst children?</td>
</tr>
<tr>
<td></td>
<td><strong>Pro-social Behavioural Problems</strong></td>
</tr>
<tr>
<td>24</td>
<td>Do children consider the feelings of other people?</td>
</tr>
<tr>
<td>25</td>
<td>Do children share freely with other children?</td>
</tr>
<tr>
<td>26</td>
<td>Do children appear to be helpful if someone is hurt, upset or feeling ill?</td>
</tr>
<tr>
<td>27</td>
<td>Do children appear to be kind to younger children</td>
</tr>
<tr>
<td>28</td>
<td>Do children often volunteers to help others?</td>
</tr>
<tr>
<td></td>
<td><strong>Hyperactive Behavioural Problems</strong></td>
</tr>
<tr>
<td>29</td>
<td>Do children seems to be restless, overactive, cannot stay still for long?</td>
</tr>
<tr>
<td>30</td>
<td>Do children seem to be constantly fiddling or twisting?</td>
</tr>
<tr>
<td>31</td>
<td>Do children appear easily distracted?</td>
</tr>
<tr>
<td>32</td>
<td>Do children easily lose concentration</td>
</tr>
<tr>
<td>33</td>
<td>Do children appear to have good attention by completing classroom work?</td>
</tr>
</tbody>
</table>
Appendix 9: Qualitative data collection Interview Schedule

Interview Schedule
Thank you for agreeing to complete this survey. Your participation is greatly appreciated and will undoubtedly provide useful information about psychosocial health and well-being of learners. The survey will take approximately 10-15 minutes to complete.

Please answer the following questions as honestly as possible, by writing your response in the space provided.

Does the school provide counselling and support services to parents and children?

Do parents of learners know where their children are referred to in case of any emergency that might occur at school?

Do children seem to be rather lonely at school?
<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the school provide support for children with medical conditions?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Is there a structure at school to deal with children with medical</td>
</tr>
<tr>
<td>conditions?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Does the school actively discourage physical and verbal violence</td>
</tr>
<tr>
<td>against children?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Do children often get bullied by other children?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Does the school have any policies and programmes in place to prevent</td>
</tr>
<tr>
<td>children from being bullied at school?</td>
</tr>
</tbody>
</table>
Does the school actively discourage harsh punishment against learners?

Thank you for taking the time to complete this questionnaire. Your assistance in providing this information is very much appreciated. If there is anything else you would like to tell us about the survey, please do on the reverse side of the questionnaire.

Appendix 10: Focus Group Discussion Interview Schedule

Interview Schedule of the Focus Group Discussion

1. Do you think the school health index score card is user friendly for primary schools in South Africa?
   
   • Probing question:
   
   o What is your opinion towards the design of the score card?

2. Do you think the school health index score card is useful for a primary school setting?

   • Probing question:
   
   o Do you think it will be a substitute for the current journals you are keeping?

3. Is the language appropriate for teachers/educators in the School Health Index Score Card?

   • Probing question:
   
   o Are you comfortable having the score card designed in English?

4. Is the School Health Index Score Card a useful tool which teachers/educators can use to assess learners with psychosocial health and well-being challenges?

   • Probing questions:
   
   o Do you think the score card addresses all psychosocial health and well-being
issues concerning children?
  o What would you add?

5. **Does the school health index score card focus on the psychosocial health and well-being by learners in general?**
   - Probing question:
     o What is your opinion concerning the questions ask pertaining psychosocial health and well-being of children?

6. **Can the school health index score card be implemented in primary schools in South Africa?**
   - Probing questions:
     o What would you think about implementing the score card in as part of the education curriculum in primary schools?

7. **Does the school health index score card provide teacher/educators with a clear understanding of psychosocial health and well-being?**
   - Probing question:
     o Are you clear on what constitute psychosocial health and well-being?

8. **Does the school health index score address all psychosocial needs for children in early childhood development?**
   - Probing question:
     o Is there anything that you would like to contribute to the overall design of the score card
Appendix 11: Delphi Study Invitation Letter

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: 076 573 8386
E-mail: daniels.karin8@gmail.com

Dear Sir/Madam

REQUEST TO PARTICIPATE IN A RESEARCH PROJECT ENTITLED:

Health promotion: The design, implementation and evaluation of a school health index score card that assesses psychosocial health and well-being in early childhood development in schools

Research conducted both internationally and within South Africa indicates that Early Childhood Development (ECD) is an important developmental phase for children from birth to nine years of age. ECD is important because it is characterised by rapid growth and development either enhancing or hindering development and learning abilities across the lifespan. One of the challenges indicated with particular focus on ECD depends on the interaction of factors such as: good health between children and parents, good nutrition, strong social support, good parenting and the adequate stimulative interaction with individuals in the community. Studies indicate further that poor early development affects the mental and physical health and learning of an individual in the later span. When considering the differences between South Africa and developed countries with regards to a standard approach to assess child well-being, there has been a lack of focus on child health which has a detrimental impact on the psychosocial health and well-being of children particularly in South Africa. Through health promotion, the school environment provides a perfect opportunity to promote psychosocial health and well-being because children spend most of time at school. The results from this research study will help the (1) South African government, (2) policy makers, (3) principals, (4) teachers, (5) public sectors and (6) community members at various levels to become involved and to enabling health promotion, by focusing on psychosocial health and well-being of the learner at primary school level but
also in the broader communities. With innovative thinking about collaborating to achieve health promotion and disease prevention objectives for primary school learners, it elaborates on the concept of psychosocial health and well-being by implementing a School Health Index Score Card. The SHISC focuses on the promotion of psychosocial health and well-being, amongst primary school learners which forms an integral part of the mission of schools. The SHWISC provides knowledge and skills that learners need to become healthy and productive adults. By implementing SHWISC will help to (i) improve the health and safety of students, (ii) increase the capacity of the learner’s ability to learn (iii) decrease absenteeism and by (iv) improving physical fitness and mental alertness and will aid teachers/educators to assess learners according to the psychosocial challenges experienced by the learners on a daily level. The SHWISC would serve as a self-assessment tool and framework for South African primary schools in which programmes and policies of schools can improve. It also provides an important understanding of the strengths and weaknesses of policies and practise, by developing an action plan to improve psychosocial health and well-being promotion in primary schools.

The aim of the study will be to design, implement and evaluate a school health index score card to assess psychosocial health and well-being in Early Childhood Development in schools.

In order to achieve this aim the researcher set out to firstly examine the current health promotion practices in ECD in primary schools. Secondly, following up with exploring the current assessments and guidelines used in psychosocial health and well-being promotion in ECD in primary schools. Thirdly a systematic review of literature was done pertaining to previous studies that examines psychosocial health and well-being in ECD using a school health index score card. Concluded in the design of the SHISC that assesses psychosocial health and well-being of learners in ECD in primary schools in rural areas of Grabouw, South African

The aim now is to evaluate whether the SHISC will be feasible, for which your input and expertise will be invaluable. Data will be collected from a panel of experts to whom a maximum of two rounds of questions related to the designed score card will be presented. Your participation will require completing of two questionnaires online and to submit the
completed questionnaire with ease of administration, designed in Microsoft Word. The questionnaire will take approximately 10-15 minutes to complete.

The first round includes the completion of a consent form as well as an information sheet that outlines your participation, rights and responsibilities as a participant. The second round will include the demographics, content of the designed score card and specific questions that pertain to the feasibility of the scorecard. The format of the questionnaire will enable the experts to rigorously discuss the components of the design and to advise on possible limitations or corrections needed. The third round will engage with any items or issues identified for revision of the previous round should there be any.

This letter thus serves to invite you to participate in the Delphi process. Should you be willing to participate, please complete and sign the consent form attached to the email sent to you for completion that will complete the first round as outlined above. After this section is completed, please return the completed form to the researcher please. When the aforementioned round is completed, the next round of the Delphi will be sent to you in the same format as the consent detail section.

Thank you for your consideration to participate in this study, and I am looking forward to hearing from you.

Karin Daniels

PhD student (2527157)

University of the Western Cape

2527157@myuw.ac.za
Title of Research Project: Health promotion: The design, implementation and evaluation of a school health index score card that assesses psychosocial health and well-being in early childhood development in schools

The study has been described to me in a language that I understand and voluntarily agree to participate

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td>Witness</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

**Study Coordinator’s Name:** Professor Nicolette Roman

**University of the Western Cape**

Private Bag X17, Belville 7535

**Telephone:** 021 959 2277/2970

**Email:** nroman@uwc.ac.za
Appendix 13: Health Index Score Card for South African Primary School Learners

Instructions

1. Carefully read and discuss the questions and scoring descriptions for each item listed on this Score Card.
2. Circle the most appropriate score for each item.
3. Calculate the overall score after all the questions have been answered.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Not in Place</th>
<th>Partially in Place</th>
<th>Fully in Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify and track learners with cognitive challenges (e.g. language, reading, mathematics, interpreting visual cues)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Identify and track learners with social functioning challenges (e.g. getting along with peers and manage daily activities (e.g. packing away toys, cleaning of his/her desk)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Identify and track learners with emotional functioning challenges (e.g. feeling fearful, upset, sad, angry, tired, worried, trouble sleeping)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Identify and track learners with participatory challenges (paying attention, forget personal items, absent due to illness)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Identify and track learners with peer interaction challenges (e.g. prefer playing alone, generally seem lonely, seeking positive affirmation from other children)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Identify and track learners who are often irritated by other children, often lies, often fights with other children</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Identify and track learners with hyperactive/inattention problems (e.g. seems restless, overly active, cannot keep quiet for long, constantly fidgeting, easily distracted, poor concentration)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
8. Identify and track learners with mental health problems (e.g. depression, anxiety, aggression) &nbsp; 0 &nbsp; 1 &nbsp; 2

9. Identify and support learners that lack interest in school and/or poor academic performance &nbsp; 0 &nbsp; 1 &nbsp; 2

10. Measures implemented to protect learners from abuse, including corporal punishment, verbal abuse, physical abuse &nbsp; 0 &nbsp; 1 &nbsp; 2

11. Promote parent-child interaction concerning learning, low education, poor social support and optimal development &nbsp; 0 &nbsp; 1 &nbsp; 2

12. Encourage learning, positive discipline, play activities for learners &nbsp; 0 &nbsp; 1 &nbsp; 2

13. Learners adaptation at school &nbsp; 0 &nbsp; 1 &nbsp; 2

14. Learners stress, abuse, neglect, family violence &nbsp; 0 &nbsp; 1 &nbsp; 2

Family support

15. Communicate with families on academic performance of learners &nbsp; 0 &nbsp; 1 &nbsp; 2

16. Family involvement in school decision-making for referral of learners according to perceived challenges &nbsp; 0 &nbsp; 1 &nbsp; 2

17. Family involvement in learning at home &nbsp; 0 &nbsp; 1 &nbsp; 2

Community support

18. Recruit and involve community members as volunteers to enrich school health and safety programs &nbsp; 0 &nbsp; 1 &nbsp; 2

19. Train community members as volunteers to enrich school health and safety programs &nbsp; 0 &nbsp; 1 &nbsp; 2

20. Identify and refer learners involved in violence &nbsp; 0 &nbsp; 1 &nbsp; 2

Co-curricular support

21. Teachers/educators instill the values to respect the view and feelings of others (e.g. peers, staff members, parents) &nbsp; 0 &nbsp; 1 &nbsp; 2

22. Teachers/educators provide motivation for learners to develop social skills (e.g. interaction and good communication with others, ability to listen, politeness, assertiveness, friendliness, leadership) &nbsp; 0 &nbsp; 1 &nbsp; 2

Systems/Services for current school psychosocial support

23. Social welfare services provided by a social worker for learners and their parents/caregiver &nbsp; 0 &nbsp; 1 &nbsp; 2
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Psychological services provided by a school psychologist</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. Counseling services provided for learners, parents/caregivers by a counselor (e.g. trauma, HIV)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26. Counseling services provided for learners and teachers by a counselor (e.g. trauma, HIV)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>27. Professional development for teacher/educators on meeting the diverse need of learners</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>28. Professional development for teachers identifying psychosocial needs of learners</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>29. Professional development in delivering curriculum in psychosocial health education</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>30. Policies and programs at school for learners being victimized/peer victimization (e.g. bullying)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>31. Health services provided by a full-time school nurses assessing learners with medical and related problems</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>32. Identification and track learners with chronic health conditions (e.g. diabetes, obesity, asthma, tuberculosis, worm infestation, measles, HIV)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>33. Training for staff members on First Aid</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>34. Medical emergency response plans</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>35. Written policies for carry and self-administration of quick relief medications</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>36. Referral systems for learners and their parents/caregivers in case of medical emergencies</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Safety and protection for learner well-being**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>37. Written school psychosocial health and safety policies</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>38. Essential topics on preventing unintentional injuries for curriculum</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>39. Essential topics on preventing violence (e.g. physical, verbal)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>40. Prevent harassment and bullying, victimization/peer victimization</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41. Staff development on unintentional injuries and violence</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>42. Health and safety promotion for learners</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>43. Health and safety promotion for families</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td></td>
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</tr>
<tr>
<td>44. Communicate psychosocial health and safety policies to learners</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>45. Communicate psychosocial health and safety policies to parents</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>46. Communicate psychosocial health and safety policies to staff members</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>47. Communicate psychosocial health and safety policies to visitors</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>48. Implement a referral system for learners with psychosocial challenges, if no systems are in place</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**COLUMN TOTALS:** Add the numbers for each column and enter the sum in this row.

If you decide to skip any of the topic areas, make sure you adjust the denominator for the module score (96) by subtracting 2 for each question skipped.

---

**Assessor's Comments and Recommendations**

---

**Assessor's Signature:** ...........................................  **Date:** ........................................
Appendix 14: Delphi Study online questionnaire for teachers, principal’s social workers, psychologist, health promotion officers, nurses and experts in the field of early childhood development (ECD).

1. Please answer the following questions according to the attached school health index score card as honest as possible.
2. The answers to the statements range from 1- strongly disagree to 5 – not applicable.
3. Please answer the statements by placing a tick (√) in the appropriate box.

<table>
<thead>
<tr>
<th>SECTION 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Information</td>
</tr>
<tr>
<td>What is your sex?</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>What is your race?</td>
</tr>
<tr>
<td>Black/African</td>
</tr>
<tr>
<td>Coloured</td>
</tr>
<tr>
<td>Indian/Asian</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>What is your age?</td>
</tr>
<tr>
<td>What is your religion?</td>
</tr>
<tr>
<td>Hinduism</td>
</tr>
<tr>
<td>Judaism</td>
</tr>
<tr>
<td>Islam</td>
</tr>
<tr>
<td>Christian</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>What is your occupation?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1. The school health index score card is user friendly for primary schools in South Africa?</td>
</tr>
<tr>
<td>2. The school health index score card is useful for a primary school setting</td>
</tr>
<tr>
<td>3. The language in the school health index score card is understood by teachers</td>
</tr>
<tr>
<td>4. The school health index score card is a useful tool which teachers/educators can use to assess learners with psychosocial health and well-being challenges</td>
</tr>
<tr>
<td>5. The school health index score card focus on the psychosocial health and well-being of learners in general</td>
</tr>
</tbody>
</table>
6. The school health index score card can be easily implemented in primary schools in South Africa

7. The school health index score card provide teachers with a clear understanding of psychosocial health and well-being

8. The school health index score addresses all psychosocial needs for children in early childhood development.

SECTION 3

Please share any suggestions and/or concern that you may have with regards to the school health index score card by answering the following questions:

1. What would you change concerning the content of the school health index score card?

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2. What would you remove concerning the content of the school health index score card?

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3. What would you add concerning the content of the school health index score card?
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4. What would you recommend concerning the overall structure of the school health index score card?
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THANK YOU FOR PARTICIPATING IN THIS STUDY
Appendix 15: Editorial certificate

19 July 2016

To whom it may concern

Dear Sir/Madam

RE: Editorial Certificate

This letter serves to prove that the thesis listed below was language edited for proper English, grammar, punctuation, spelling, as well as overall layout and style by myself, publisher/proprietor of Aquarian Publications, a native English speaking editor.

Thesis title

HEALTH PROMOTION: THE DESIGN OF A SCHOOL HEALTH INDEX SCORE CARD TO ASSESS PSYCHOSOCIAL HEALTH AND WELL-BEING IN EARLY CHILDHOOD DEVELOPMENT AT PRIMARY SCHOOLS

Author

Karin Elizabeth Daniels

The research content, or the author’s intentions, were not altered in any way during the editing process, however, the author has the authority to accept or reject my suggestions and changes.

Should you have any questions or concerns about this edited document, I can be contacted at the listed telephone and fax numbers or e-mail addresses.

Yours truly,

EH Londt
Publisher/Proprietor