CHAPTER ELEVEN

DISCUSSION OF RESEARCH FINDINGS

11.1 Introduction

According to the WHO, the large-scaled implementation of life skills education could support private and public systems as one of the most effective methods and is aimed at facilitating the development of psychosocial skills that are required to deal with the demands and challenges of everyday life (WHO, 1999b).

> Life skills education is designed to facilitate the practice and reinforcement of psychosocial skills in a culturally and developmentally appropriate way; it contributes to the promotion of personal and social development, the prevention of health and social problems, and the protection of human rights (WHO, 1999b, p. I).

Life skills programmes are holistic and multileveled models that teach individuals social and emotional skills such as problem-solving, creative and critical thinking, self-awareness, communication, interpersonal relations, empathy, and emotional self-control to enable them to develop a sound and positive mental health (see also Elias & Weissberg, 2000 in WHO, 2005).

Thus, the major aim of the presented study was to evaluate the effects of a life skills programme on HIV/AIDS and sex education, called the *Child Mind Project*, on pre-adolescents. The project aimed to develop social and psychological competencies to cope with prevalent life tasks and to enhance the development of health behaviour, thereby reducing the risk of HIV infection among pre-adolescent children (10 – 11 years of age), i.e. before they become sexually active.

As a target group, children have an ability for psychosocial adaptation and a great enthusiasm for new learning input; it was therefore assumed that by positive empowerment, protective factors for health behaviour could be encouraged and risk factors endangering their mental health be stemmed.

Thus, the second major goal of this study was to identify risk and protective factors influencing the mental and physical development of children in the case study community. This enables the researcher to modulate the learning programme on the actual needs and demands of the targeted group.

Further underlying objectives of this study were (a) to develop a comprehensive and multidisciplinary approach for this specific target group at the case study school, (b) to sustain the project at the school as a fully implemented life skills programme for all grade 4 learners, (c) to establish the project as a community-based health initiative targeting predominantly children, and (d) to identify environmental factors that affect the outcomes of the intervention. Thus, the final *points of discussion* are:

a) Does the intervention show the desired effects on the individual and interpersonal level?;
b) Was the programme implemented appropriately to the contextual conditions?;
c) Could the intervention be sustained due to the undertaken efforts at school and community level?; and
d) What kind of recommendations have to be made if it would be aimed at delivering and implementing a similar programme under normal everyday conditions?

As Mukoma and Flisher (2004) state, the challenge for the evaluation of school-based health promotion initiatives lies in achieving a balance between scientific rigour and consideration of practical possibilities and needs. In the following paragraphs the research results of this study are discussed in accordance with the gathered data in the needs, process and outcome evaluation which employed a variety of special quantitative and qualitative instruments.

11.2 The Need for Health-promoting interventions with Children in the Case Study Community

Due to the conviction that health is determined by the physical, mental and social well-being of an individual, the need analysis, in correlation with results of the field interviews, gathered important data on *risk and protective factors* that affect child development in Kayamandi. Sociodemographic and socioeconomic conditions, and health/security and educational infrastructures were identified as relevant areas to incorporate specific risk and protective factors. However, most of the factors identified make children vulnerable to unsafe mental and physical health, like insecurity due to instable family units and exposure to poverty, risks of violence, exposure to ill physical health by malnutrition and unhygienic living conditions, a rapid social change by large-scale migration processes, and hopelessness due to low standards of education and reduced future prospects (see also WHO, 2005, p. XIIX).

These sets of vulnerabilities to health risks during childhood are proposed to increase with maturation if preventive health promoting initiatives are not undertaken to equip these children with competencies that would enable them to cope with prevailing developmental and life demands.

11.3 The Applicability of the Coordination Structure

11.3.1 The Functioning of the Intersectoral Educational Cooperation Model

Because of the inability of the case study school to implement the governmental school-based life skills programme on AIDS and sex education due to structural and personal constraints, I, as an external researcher, took the initiative to undertake a pilot study for the full implementation of a non-governmental school-based programme in cooperation with the SAA in Stellenbosch and the Ikaya Primary School in 2002. With the continuation of project funding from a German developmental aid foundation the pilot study commenced in 2003.

During the planning phase of the study, the unit of the SAA doing health promotion interventions with youth in Kayamandi became an independent section 21 organisation, called the Ikamva Lethu Centre. The local partners' character changed due to these structural transformations and became rather unreliable in terms of future work of the project following the end of the pilot study. As a consequence another NGO, unfortunately non-local, but working in AIDS education moved into the position to take over the project after the end of the pilot study. These decisions were made in agreement with the Ikamva Lethu Centre as the first and local partner. The new situation was confirmed with the school and all arrangements for timetable implementation, resource support and class teacher involvement were made.

A difficult situation for me as the evaluator was caused by these *structural changes*. The disadvantage of the attempts to safeguard the conduction of the pilot study placed me in a position of action research where I became fully responsible for research as well as project management. However, the involvement of the new partner could not prevent this dual position over time.

The *positive outcomes* of this cooperation model were the input gained from partners regarding teaching material, community support and protection, public relations with the school governing board, and workshops for HPTs and mothers. In other words, the three institutions could put together their personnel and material resources and professional expertise to make the programme function properly and make it more suitable to the target group, for instance, by emphasising the schooling and qualification of the HPTs. These inputs reached a low cost budget of which the biggest part was spent on the expenses of health promotion trainers.

The necessity to establish a strong project partner system and a clear system of responsibilities right from the beginning would have been a precondition of the CMP to

reach sustainability. The *fragmentary cooperation* model caused by a low capacity building and a magnitude of instabilities and uncertainties between the partners could not be changed into a more stable structure during the implementation phase. Finally, this cooperative approach can be considered to have been non-effective to sustain the project because no clear ownership of the partners could be established.

The other barrier to the sustainability of the project was the inability to obtain further funds for the project from within South Africa. Due to the fact that no further resources could be allocated, and the death of one of the trained HPTs, as a main educational column of the CMP, the project was terminated in 2004.

11.3.2 The Effects of Networking with the Community

In order to strengthen the pilot project in its larger physical environment several efforts were made to develop a network with specific governmental and non-governmental institutions in the community (see also chapter 5).

As Guba and Lincoln (1989) state the involvement of various stakeholders means to respond to local needs with an acceptable cultural framework. This consequently means that if research is seen as an integral part in the increased effect of the intervention, it also encourages *constant monitoring* and provides a practical way to cross boundaries between theory and practice (Guba & Lincoln, 1989). Because my 'dual position' in this process most likely affected my relation to the community and especially the case study school, who increasingly associated the project itself with my person, the 'evaluator in her dual position' formed a gateway between field work (practice) and research (theory). In other words, the action research approach finally effectuated that various local organisations played an advisory role in the evaluation of the intervention in terms of cultural, environmental and political determinants, with the result that their expertise had an effect on the research and practice of this study.

Regarding the intervention, the negotiations involved a network of various local experts and institutions who were encouraged to support the CMP, namely: a civic group, a religious-based organisation, the Kayamandy Community Clinic, the Social Welfare Organisation (to a certain extent), the youth centre and the primary school as partners, and local artists. This network turned out to be extremely important for keeping in contact with institutions and ensuring the direct involvement of stakeholders and experts in the community (e.g. the community clinic, youth centre and drama group), so that the project could be implemented

in its physical environment and the effect of several sessions could be enlarged (e.g. the drama on abuse, or medical support) for the time of the intervention.

Advantages for the study were that regular meetings ensured a constant discussion on research findings between local experts and the evaluator. To avoid loss of objectivity the interpreted research results were discussed with local people and experts. Furthermore, for the evaluator as a cultural outsider coming from another country it was vital to understand cultural patterns, social convictions and/or prevalent value systems in order to reduce research bias due to contrary value systems. In other words, the *negotiation procedures* were especially important to build an understanding for the need of this health initiative targeting sensitive topics such as HIV/AIDS and sex education that are normally being rejected and stigmatised, and to establish a net of safety measures to protect the health promoting initiative as well as the HPTs who lived in the community.

Although negotiation processes within the Kayamandi community were positive in that they *safeguarded the pilot study*, they were ineffective in gaining community support to introduce the project as a new community-based approach for children. This was due to (a) the project partner organisations being identified as responsible institutions to take over, (b) the fragmentary infrastructure within the community which led several organisations to feel incapable to partnership the project, and (c) the project lacking complete support of people in powerful positions such as in the town council or local political parties.

Finally, with this support system the CMP gained again a large amount of material resources and personal support to keep the intervention functioning throughout the intervention phases on a low cost basis.

11.4 The Incorporation of HPTs, Class Teacher and Parents

In South Africa, public schools in impoverished settings face specific problems that influence the effectiveness of their daily work to enlarge childrens' cognitive capacity and to equip them with social skills for their later role as citizens. At the case study school it was found that the *school atmosphere* was characterised by difficult structural and financial situations and a practiced authoritarian pedagogical ideology of corporal punishment that influenced learner-teachers, as well as learner-learner relations, and learning situations.

The exhaustion of teachers, their feeling of overstrain and isolation in facing a magnitude of problems are considered to be reasons why the governmental life skills programme on AIDS was not implemented in the schedule of the case study school as an additional learning area.

As an alternative educational methodology the idea was suggested to implement a cooperative teaching model between teachers and health promotion trainers as external educational support at the case study school.

11.4.1 The Class Teacher – Inputs on Project and School Level

The roles of the class teacher in this educational cooperation model encompassed three areas of input: (a) to form a bond between the school (e.g. management, other grade 4 teachers, case work) and the CMP, (b) to support the preparation for parent meetings (e.g. name lists, room arrangements), and (c) to give expert pedagogical input to the health promotion trainers. From this experience it is recommended that *support teachers* be involved at the start of such an educational cooperation model because they are familiar with daily schedules and procedures at school. With the support of the teacher it was much easier to manage the project from within the school setting, including the organisation of outdoor trips and parent meetings.

Despite the fact that she often not attended the full duration of the sessions for the sake of administrative work, the teacher's involvement in classroom activities were found to be effective in creating space for herself to gain further knowledge and to experience a more relaxed position without being fully responsible as an educator. As an example, while many evaluations of school-based life skills programmes report that teachers often feel overburdened or ashamed to convey key preventive messages such as condom use, the teacher at the case study school used the opportunity to gain more information on HIV/AIDS and preventive barriers. In the session on HIV/AIDS, for example, she came to the front of the class and expressed her interest in the use of female condoms. The teacher's increased and open interest in the topics taught might be an indication of her feelings of relief and comfort in the classroom.

The most negative finding of the cooperation model was that old *behavioural codes* between the teacher and children could not be broken. In the last session of the booster unit the class teacher beat late-coming learners with a stick. Two problems arise from this type of behaviour with regard to the programme and its outcomes. On the one hand, it can be considered a risk-taking enterprise to involve a teacher when rigid conflict-solving methods are used which contrast with approaches to create a healthy learning environment in the classroom. On the other hand, other children most probably observed the scene and asked themselves what the appropriate behaviour would have been; this might have affected the outcomes on the personal level.

This example therefore illustrates that the life skills approach follows non-violent conflict regulations and tries to enable the child to express an own opinion with confidence; such an approach is in contrast to prevalent school ideologies which regard those kinds of behaviour as disrespectful acts towards an authority. Further research is clearly needed to examine whether children are exposed to confusion or further threats when they act in two different social interaction systems, and to detect what these threats are, in order to implement safety measures.

11.4.2 The HPTs – An Opportunity for Educational Support?

Two unemployed women who have been involved in volunteer work in the field of child welfare and medical support for HIV and STI counselling at the office of public health in Kayamandi were trained in the manual of the life skills programme over three months before the start of the intervention.

The HPTs' reports revealed that they assessed their own self-confidence more positively in combination with an increased experience in teaching and the use of learning methods over the course of Intervention I. Although the applied teaching methods were generally well-managed in the classroom, identified problem areas were time management and the application of complicated methods such as frontal teaching, group discussion and conflict-solving management in the classroom. Thus, further *continuous training* is recommended to assure the accuracy of taught specialised knowledge as a precondition to increase the precision of modelled situations, and to stabilise and manifest individual teaching competencies and skills over a prolonged period.

Furthermore, the teamwork was also found to increase self-confidence in the HPTs, to set them at ease in the classroom setting and to decrease stressors in teaching situations, for example the management of group work sessions or class management. Both HPTs assessed their relations to learners as positive and mutually contributing to an increased commitment to their work and role as HPTs.

Even though both HPTs did not express any problem to work with boys and girls in the sessions, their *gender identities* was considered a hindering factor in the transmission of key messages relating to AIDS awareness and role allocations of 'men' and 'women' in the classroom. During the phase of team establishment several consulted experts working for organisations in the community were divided on whether to insist on a male HPT in the project. Some argued that the involvement of a man would bear the danger of abuse for female learners, due to the high prevalence of rape in South African schools; others made it

clear that it would increase the risk of power struggles within the team that could undermine the project in the end.

Despite the above mentioned considerations in the planning phase of the intervention, employing both male and female HPTs would have been of great advantage for male and female participants to experience 'models' of both genders. Especially the experience of a positive male role model might have strengthened the message of a safe interaction between men and women and would have supported an identification process of boys for their later male role in family and society. In addition, male participants would possibly have regarded and accepted a man's opinion as more valuable. These assumptions are underlined in the assessment of boys' feeling of comfort in being educated by the HPTs. Especially regarding the sensitive sessions on HIV/AIDS and sexual abuse more boys expressed their dislike to work with the HPTs than in other sessions.

Another finding was that during the intervention phase, children reported *cases of abuse* to the HPTs and the class teacher with increased trust. Although the project manager and the class teacher took over the main parts of management and referred special cases to responsible institutions, the professional competencies of the HTPs were not sufficient to enable them to handle such cases independently. From this experience the conclusions can be drawn that HPTs need further education in the field of socio-psychological support, and that the employment of a social worker who concentrates on case work in the programme so that HPTs can concentrate on teaching, be considered in the run-up of the planning phase.

11.4.3 Parents on Board – A Both-Sided Support System

The two socialisation columns most influencing on child development are parents (or families) and teachers (schools). Due to the fact that the relationship between parents and teachers seemed to be problematic at the case study school several attempts were made to more closely involve parents in the project undertaken at the school as the most important emotional role models and legal guardians of their children. More than four *parent meetings* were held to inform parents about the content of the sessions, their children's learning achievements and to ask their feedback on the positive or negative effects of the intervention regarding their children's behaviour. To increase the accuracy of information transfer the language used during meetings was isiXhosa or English, whilst all presented information material was in isiXhosa.

Some of the outcomes of these meetings were that after the considerable mistrust towards the project was partly abridged, parents were relieved that 'someone' took over this sensitive

field of education. The use of educated ‘outsiders’, the health promotion trainers, did not appear to be a point of critique; however, it was clear that parents controlled taught knowledge and checked information papers. According to statements by parents the intervention positively affected the communication between parents and their children. In addition, as the parents’ own educational level is sometimes so low that they often feel incapable of fulfilling a supportive educational role for their children, *further health-promoting workshops* of health-promoting initiatives or other informal platforms for interaction were found to be very effective to pass on knowledge. It was found that an awareness workshop on HIV/AIDS with the female caretakers of the children participating in the intervention group was an effective method to offer a platform for discussion. Despite the fact that only five mothers joined the workshop, it changed unexpectedly into a meeting where mothers discussed problems relating to child care as well as personal problems affecting their own emotional state, for example feelings of overstrain and helplessness in a situation of extreme poverty. As a side note, a further unexpected outcome of this meeting was that women who had never talked about HIV/AIDS walked home with five boxes of condoms that they wanted to distribute at shebeens in Kayamandi.

However, a once-off workshop is not recommended from this experience. These kinds of interventions have to be organised in a regular and continuous way in order to be effective. It is thus recommended that workshops for parents be planned parallel to the undertaken life skills programmes to (a) allow parents to keep up with their children’s development in the programme, (b) reduce the pedagogical attempts of the parents and the approach of the life skills programme to a common denominator, and (c) put parents in a position to be role models for their children, which most likely could contribute to normalising child-parent relations and reducing stressors within families.

11.5 The Efficacy of the Applied Topics and Methods

The Child Mind Project, as a life skills programme focusing on AIDS awareness and sex education, is a multimodal intervention which uses specific topics that are related to the HIV/AIDS pandemic. Due to the disadvantaged setting in which the pilot study was undertaken, several sessions and methods were also assessed and re-modulated during the evaluation process in order to make them more appropriate to the culture and the living standards of the children and to closely interweave them with specific demands and needs. The gathered data of the needs analysis formed the basis for those adjustments.

Specific *re-modulations* were made in the sessions on healthy nutrition (e.g. food), sexual abuse (e.g. drama play), HIV/AIDS (condom promotion), and the planning of outdoor trips (e.g. community clinic or youth centre) to make existing infrastructures more accessible to the children. Furthermore, not only the results from the needs analysis were taken into consideration for the adjustment process; the secret box was found to be a valuable instrument to detect fields of interest from children. One field of interest was the issues of HIV/AIDS or sex. As these fields are emphasised in grade 6 in the governmental programme, the topics were incorporated in the intervention as a result of the children's questions in the secret box and after consideration was given to the high number of teenage pregnancies at primary and secondary school level in the community.

The learners' reports and opinion poll revealed that the children assessed the programme as mainly 'liked' or 'positive'. With regard to gender differences boys expressed a greater feeling of boredom during the sessions than girls, who almost unanimously stated that they had fun during the sessions. The same gender differences were found in the analysis of attitudes towards specific topics and applied methods. While girls expressed a great interest in most of the topics and enjoyed applied methods, boys were more critical and expressed the greatest dislike in topics on hygiene, body anatomy, HIV/AIDS and sexual abuse. From those findings the assumption could be drawn that boys had obtained knowledge on those topics through other channels, however, which can not be verified by gender difference in knowledge of HIV/AIDS regarding quantitative outcomes. However, another and more convincing explanation for the gender differences in the general attitude towards the programme could be that the topics taught were more relevant to the developmental stage of the girls than that of the boys.

A further assumption was that a great *sense of empathy* was needed when applying sensitive and emotionally demanding topics due to the young age of the children. This assumption is supported by the results of the opinion poll. In the long-term memory of the children all of the applied topics (including HIV/AIDS and abuse) were positively assessed; however, some children still regarded emotionally demanding topics such as HIV/AIDS or abuse as negative. In general, when working with a young age group all applied methods should be lively and enjoyable with the aim to increase interest in the discussed topics and *motivate children* to perform and adopt health behaviour later in life. Activities such as the food event, the wound treatment, sport activities, and the outdoor trip were assessed by the children as the most positive experiences even eight months after Intervention II.

11.6 The Necessity of Creating a Place of Emotional Safety for Children

The subjective nature of assessing positive social relations is determined by the quality of psychosocial learning processes, which in turn affects the individual's ability of self-motivation and his/her behaviour. Positive social relations create an atmosphere of equity and fairness; good relations between all involved persons were assumed to be a precondition for *transferring social competencies* regarding positive norm constructs.

With regard to the unstable and rigorous school atmosphere it was of special importance to create an atmosphere of tolerance, respect and solidarity inside the classroom to motivate and empower learners to enlarge their cognitive, emotional and social competencies. The implemented framework, rituals and code of conduct were found to be effective methods to ensure reliable and accountable relations between all participants and to provide children and educational personnel with a healthy learning environment.

The specific *safety measures*, for example the code of conduct, turned out to be vital in an environment where physical punishment as a disciplinary method is common. In retrospect, had an emotionally safe framework where children could act and speak freely and openly not been created, the most important precondition for the implementation of a life skills programme on HIV/AIDS and sex education would have been imperilled.

11.6.1 Childrens' Interpersonal Relations – Developing Social Competencies

Because one of the main goals was to develop social competencies among participants, it was necessary to *enhance interpersonal working and learning relations* between girls and boys, and between the children and the HPTs. The children's relation with the involved teacher was not evaluated due to her absence from many sessions. The majority of the boys and girls expressed a positive attitude towards the HPTs. With regard to differences, as mentioned in paragraph 11.4.2, more boys expressed a dislike to working with HPTs on culturally sensitive topics such as body changes, HIV/AIDS and abuse.

With regard to same-gender relations, in general both sexes liked working and learning with children of the same gender. Intergender relations were assessed more positively by girls (40%) than by boys (30%) in Intervention I. Only in three sessions (*Body changes*, *Sex education*, and *Care and death*) more boys than girls preferred working with the other sex. This is most interesting because in sessions on body changes and sex education gender-

specific group work was used. It can therefore be deducted that both genders agreed to be separated in sessions on sensitive topics; furthermore, while boys enjoyed being separated from girls in one room, girls expressed more clearly that the local separation in those sessions in the same location was insufficient.

While no changes in intergender relations were revealed over the duration of Intervention I, the participant observation of four children revealed that, firstly, the programme provided an environment in which boys and girls learned and acted with each other without any refusal or dispute and, secondly, three of the four children established friendships with the same gender from Intervention I to Intervention II. These findings most likely correlate with the developmental stage of the children; during the transition phase from late childhood into adolescence they enlarge their social networks and establish more stable same gender relations. A health-promoting intervention like the CMP thus offers an environment that enhances such interpersonal relations important for emotional comfort and the practice of social competencies. This fact also puts more emphasis on the establishment of friendship systems in the programme, as well as the enhancement of children's safety and social networks within the class and outside.

11.7 Research Gaps – Considerations regarding Learning Outcomes on the Individual Level

The outcome evaluation, which evaluated psychological and social variables on the individual level, was important to make references to the sustainability of the effect of the programme. Although the results of the quantitative research instrument could not be fully interpreted regarding the effect of the intervention, the only cognitive variable – knowledge on HIV/AIDS – showed significant changes from pretest to posttest in conveying the four main messages.

It was found that significantly more children at the posttest were able to define AIDS as a disease that destroys the immune system. More children were convinced that everyone, gender or social position regardless, can get infected. Many more children knew that the community clinic or the office of public health were medical institutions where they could go for an HIV-test, whilst significantly more children knew that the use of condoms protects you against an HIV-infection. No significant differences in knowledge levels between genders were found.

However, as the quantitative results on knowledge also show, the acquisition of knowledge was not sustainable among participants; furthermore, knowledge increased significantly in

several items at follow-up test 2 without any intervention taking place. Two explanations can be given at this point. Firstly, pre-adolescent children are still in the *process of absorbing*, acquiring and organising the knowledge in their minds, thus, knowledge is somewhat instable and parts thereof can be lost over time. Secondly, the increase in knowledge can be a '*delayed processing'* of knowledge regarding HIV/AIDS. Children build new knowledge on the volume of information and symbols (meaning of words) they had gathered during the intervention. This new knowledge is confirmed and improved by *observations* in their environment, for example peer groups or families, and other stimuli, for example media. Similarly to this process, they carefully weigh up what is of importance to them and finally reformulate information so that it makes sense to them. A precondition for this process is an increased sensitivity which might be foregrounded by the intervention. Due to the instable knowledge level a long-term approach is recommended to fill possible gaps and stabilise knowledge regarding AIDS. It is also possible, though, that children simply forget what they have learned, or rather that the correspondence to reality is lower; children at this age are not yet sexually active and the acquired knowledge might be of no practical relevance to them. However, this explanation is not exactly satisfactory, given the high prevalence of HIV infections in the case study environment.

11.7.1 Considerations to the Social Cognitive Theory – the Individual's Interactions with the Wider Physical Environment

The instability in the knowledge variable can most likely be attributed to the young age of the participants or the temporary nature of the intervention, but also to growing physical and social *outside the sphere of the intervention*. The loss of knowledge of HIV/AIDS could be ascribed to an insufficient belief in the accuracy or relevance of the knowledge in the children's physical or social environment. The children grow up in a very ambiguous environment where they interact with people who either pass on a limited understanding of the disease to their children or do not believe in scientific arguments at all. For example, African healers and western medicine present two different forms of medical approaches. The former explains everything from a very holistic point of view including the belief in ancestors; the latter presents knowledge from a purely scientific understanding. These different systems also present two different methods of prevention of the HI-Virus or cure for AIDS, and need to be included in health promoting initiatives such as the CMP, in order for individuals to weigh up their personal strategies to ensure health.

The danger of the existence of two systems is that children who are heavily dependent on the transfer of knowledge from authorities and older age groups obtain incomplete or false knowledge in spite of what they have learned in a modelled situation from people such as female health promotion trainers. From this perspective it seems possible that the lack of sustainability of the results is not only due to the children simply forgetting what they have learned but also to their not believing in what had been taught during the CMP.

Bandura's social cognitive theory (1986) emphasises that health behaviour is mainly shaped by conscious decisions of rational individuals and by rationalising a complex situation with a multitude of influencing factors on the individual level (Campbell, 2003). According to his theory, it can be assumed that individual and interpersonal factors that encourage certain behavioural strategies are very much determined by the extent to which community and societal contexts enable and support the performance of such behaviour outside the intervention. In an investigation into certain intentions among children in the intervention group regarding prevailing health risks it was found that some children already expressed unsafe health intentions, for example the wish for pregnancy. Although children in this pre-adolescent phase have not developed health behaviour yet, influences from outside the intervention were mentioned. In other words, the information, skills and competencies can only manifest in an individual's mind if the social and community contexts create the basis for the absorption and performance of learned health behaviour. Such *causal opportunities* can be resources, social support, integration in social networks and/or rational systemic structures and cultural convictions. Thus, it is recommended that further research be conducted in processes that hinder or support the individual in developing certain intentions or cues to action in the social environment and existing interpersonal relations within the family and school sphere.

Other factors that prevented the sustainability of knowledge of the individual can most likely be traced to the living conditions of the children. Most of the children experience a *shortage of basic needs*, such as food, shelter, or security. Many of the issues raised concerning HIV/AIDS are assumed not to be particularly relevant to the individual's daily life. For example, many children in the intervention group were often hungry during the sessions; this while they partook in a programme that proclaims high values such as well-being or protective methods for the future. The lasting success of a programme that targets well-being, self-fulfilment and appreciation can only be measured when the satisfaction of such basic rights is ensured (Maslow, 2002). In order to reinforce the personal conviction that there is a real life threat, interventions need to be more relevant to the individual's daily

health demands and need to provide real opportunities for the increase of physical health and well-being. It is recommended that funding proposals incorporate a section on the provision of food to children that live in extreme poverty.

11.8 Key Recommendations

In this section recommendations are made regarding the evaluation and implementation of a non-governmental school-based life skills programme on HIV/AIDS and sex education planned for pre-adolescent children in a semi-urban area with similar socio-economic and socio-cultural conditions.

11.8.1 Recommendations regarding further Investigations

- The *methodology* of this thesis encompassed to include the evaluation of the personal level (cognition, emotions), interpersonal interactions (HPTs, learners, gender relations) as well as the closer (school) and wider (school) physical environment. It is recommended that in order to fulfil the factors that influence child development, the family as well as the actual interpersonal relations at the school setting be examined. In other words, a greater emphasis has to be put on the analysis of the social environment, especially the location of the health promoting project, to identify resources and barriers that influence the project in its implementation and outcomes.
- The *outcome evaluation* could not reveal substantial data on the psychological or social variables presented in the research model. The development of a sound instrument tested in the long term, and appropriate to age, language and cultural conviction is emphasised to increase scientific knowledge.
- The social-cognitive (thought and consciousness) processes between models and individuals (e.g. observation) play a paramount role in Bandura's *social cognitive theory* (1986). However, when working with children, emotions are vital for encouraging interest and motivation. The cognitive and emotional dimensions and their interplay are decisively dependent on the function of the social dimension, which means that, if the model (or its lesson sessions) is not acceptable regarding content and emotions, the learning processes will be distorted (Illeris, 2002). It is therefore recommended that further variables examining emotional competencies (e.g. empathy) should be included in the research model.
- Regarding cognitive variables like the 'knowledge on HIV/AIDS' variable, it is recommended that further research has to be done in order to examine the acquisition of knowledge and skills that bear a relation to the everyday life of children, when assessing

the content of the topics used. In this way, the focus shifts towards the children's lifestyle, instead of only concentrating on the development of a certain protective health behaviour.

- The life skills programmes encouraged more self-confidence and open behaviour in children. This, however, stood in contrast to the hierarchal construct and rigid pedagogical approach practised at school. Further methodological input is recommended to examine possible consequences for children who are required to operate in two different value systems.

11.8.2 Recommendations regarding Life Skills Programmes on AIDS and Sex Education

- In the planning phase of such a programme clear and stable cooperation contracts and financial budgets have to be established to provide a basis for the sustainability of the programme.
- Regulations and codes of conduct in the classroom are recommended to provide a constant structure of the programme that offers a basis for orientation and clear preferences in interpersonal contacts (HPTs, learners, and teacher).
- It is recommended that active methods that combine learning (model) and direct experience be incorporated to encourage maximum learning interest and increased self-efficacy.
- The incorporation of socio-psychological support and on-going workshops for teaching staff is recommended for them to cope with stressors and to enhance engagement, cognitive and social competencies and increase self-efficacy.
- In order to avoid double work load on HPTs as a result of emerging cases, life skills programmes should consider involving a social worker to actively take part in the project in this specific field.
- The realisation of the aims of such programmes greatly depends on the school atmosphere and the quality of interactions between the different individuals within the physical and social surrounds. A health promoting school initiative might be a good step towards transformation to a health enhancing school atmosphere.

11.9 Conclusion

The perspectives for future generations of South African children are considered to be problematic as the consequences of the AIDS epidemic will fall on their shoulders. One of the most effective health promoting instruments to prepare children for life and future demands and to prevent HIV infection are life skills programmes. These programmes provide a wide

spectrum of positive individual experiences, a broad general knowledge, and comfort, at the same time practicing health-related skills and competencies in an enabling environment. However, to increase the effect of life skills programmes the two main socialisation columns for children, parents and schools need to be involved as partners.

Parents need to be supported in order to function as emotional and physical 'bodyguards' and social role models for their children, especially for those who grow up in impoverished settings. Furthermore, because life skills programmes often convey strongly westernised messages which stand in contrast to observed and adapted attitudinal constructs in the setting, convictions and behaviours, parents and educators involved in these programmes need to be prepared and supported to find a balance between different educational approaches towards providing health-enhancing knowledge and skills for their children.

From the experiences of the CMP it is concluded that if such life skills programmes are to be more effective, the entire school setting should be targeted as a health promoting institution that provides emotional, educational and administrative structures for all individuals to practise health-related behaviour. If this goal is not met, however, the effects of health promoting initiatives like the evaluated one will be unsteady and the outcomes fuzzy.

Lastly, the highest priority for health promoting initiatives and the key goal for the prevention of the further transmission of HIV among the younger segments of society is to reduce growing risk factors in the socio-interpersonal and socioeconomic sphere. An open public and society-wide discussion, as well as clear actions from the South African government's side to target health and social problems that increase exposure to HIV for individuals would provide a real platform for health initiatives to enhance the health of many human beings and future generations.