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Mary Lindner

A Child's Mind Required!

Evaluation Results on a Health Promoting Initiative on AIDS and Sex Education for Primary Schools

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Budrich UniPress Ltd.
Opladen & Farmington Hills, MI 2010

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A CIP catalogue record for this book is available from
Die Deutsche Bibliothek (The German Library)

© 2010 by Budrich UniPress Ltd. Opladen & Farmington Hills
www.budrich-unipress.eu

ISBN 978-3-940755-30-8 (Paperback)
eISBN 978-3-86388-383-6 (eBook)

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Die Deutsche Bibliothek – CIP-Einheitsaufnahme
Ein Titeldatensatz für die Publikation ist bei Der Deutschen Bibliothek erhältlich.

Budrich UniPress Ltd.
Stauffenbergstr. 7. D-51379 Leverkusen Opladen. Germany

28347 Ridgebrook. Farmington Hills, MI 48334. USA
www.budrich-unipress.eu

Jacket illustration by disegno, Wuppertal, Germany – www.disenjo.de
Printed in Europe on acid-free paper by paper & tinta, Warszaw, Poland.

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
Bzga	Bundeszentrale für gesundheitliche Aufklärung [Federal Centre for Health Education]
CADRE	Centre for AIDS Development Research and Evaluation
CG	Control Group
CIAC	Crime Information Analysis Centre
CMP	Child Mind Project
DAAD	Deutscher Akademischer Austauschdienst [German Academic Exchange Service]
DramAide	Drama Approach to AIDS Education
EU	European Union
HBM	Health Belief Model
HIV	Human Immunodeficiency Virus
HIVSP	HIV/AIDS/STD Strategic Plan for South Africa
HOD	Head of Department
HPT	Health Promotion Trainer
HSRC	Human Sciences Research Council
IG	Intervention Group
IPR	Index of Peer Relations
KTC	Kayamandi Town Council
MRC	Medical Research Council
NAMHC	National Advisory Mental Health Council
NBI	National Business Initiative
NDOE	National Department of Education
NDOH	National Department of Health
NFCS	National Food Consumption Survey
NGO	Non-governmental Organization
NIP	National Integrated Plan
NPPHCN	National Progressive Primary Health Care Network
OBE	Outcome Based Education
PAWC	Provincial Administration of the Western Cape
PGWC	Provincial Government of the Western Cape
PPASA	Planned Parenthood Association of South Africa
PSABH	Primary School Action for Better Health
PTT	Pilots Project in Southern Africa
RAPCAN	Resources Aimed at the Prevention of Child Abuse and Neglect

RDP	Reconstruction and Development Project
RLS	Rosa Luxemburg Stiftung [Rosa Luxemburg Foundation]
SA	South Africa
SAA	Stellenbosch AIDS Action
SAPS	South African Police Services
SATZ	South Africa and Tanzania Project
SCT	Social Cognitive Theory
SODI	Solidaritätsdienst-international e.V. [International Solidarity Service]
SPSS	Statistical Package for Social Sciences
STI	Sexually Transmitted Infections
STD	Sexually Transmitted Diseases
TB	Tuberculosis
UN	United Nations
UNAIDS	Joint United Nations AIDS Programme
UNICEF	United Nations Children's Fund
WC	Western Cape
WHO	World Health Organization

SUMMARY

Approximately two thirds (25.8 million) of the world's population infected with the Human Immunodeficiency Virus (HIV) are currently living in the sub-Saharan region. In South Africa, more than five million inhabitants are infected with the HIV-Virus. The South African group most vulnerable to HIV infection is young people between 20 and 34 years of age. It can thus be assumed that adolescents and children under the age of 15 are a less infected group and should therefore be *the major target of primary preventive approaches*. Consequently, this study is aimed at encouraging those skills and competencies required to cope with prevalent life tasks and to enhance the development of health behaviour to reduce the risk of HIV infection among pre-adolescent children (10-11 years of age) *before the onset of sexual activity*. This is done by means of a non-governmental and school-based *life skills programme on AIDS and sex education*, for socially disadvantaged children in the Western Cape Province of South Africa. The study, which is theoretically based on the *Social Cognitive Theory* (SCT) by Bandura (1986), used three types of evaluation to assess the personal, interpersonal and social context of the intervention undertaken. The *outcome evaluation* comprised a quasi-experimental research design with four test phases and was conducted by means of a self-administered questionnaire containing three psychological variables and two social variables. A *process evaluation* used the instruments of participant observation and reports to examine attitudes towards the intervention and other participating children as well as the health promotion trainers. A *needs analysis*, using the qualitative instrument of field interviews, examined risks and resources for child health within the environment of the case study. The results of the quantitative evaluation verify a significant increase in the participants' knowledge about HIV and the Acquired Immune Deficiency Syndrome (AIDS) from pretest to posttest phase. However, the follow-up tests show that *the effect of the programme is not sustainable* due to a relapse into a pretest knowledge level. Facing the insufficient sustainability of the evaluated programme, the results of the field interviews support the assumption that a magnitude of risk factors is evident in the environment of those children participating in the programme. These conditions assumingly not only negatively influence the mental, physical and social health from an early age on but *reduce the effect of the intervention* undertaken in this context. The thesis therefore concludes with recommendations for AIDS preventive and strengthening approaches for non-infected children living under these specific socio-economic and socio-cultural conditions, as they are most vulnerable to HIV infection.

PROLOGUE

How to Fight against a Snake

Once upon a time, a visitor from another world saw a wonderful place with purple flowers right in the middle of a sorrowful village. The beautiful and peaceful garden was surrounded by a high fence, making it inaccessible to everyone. The visitor lingered for a while in front of the main gate without entering. Meanwhile a woman stopped next to her and, with fear in her voice, she whispered: “Do not try to go in. Dangerous snakes live there.” The visitor was surprised. There were no snakes to be seen, only wonderful, blooming and fragrant flowers. While the visitor was still deep in thought about the invisible snakes, other persons paused for a while next to her and told her stories about people who had seen snakes on this land. Now, the visitor became scared; if so many people were convinced of the existence of snakes, then they had to be there.

Weeks passed and the visitor could not forget that wonderful garden in the middle of such a sad town. She returned and to her surprise, this time, she found children playing in the forbidden area. While the children were building a fort underneath an old, wild tree, the visitor asked them: “What are you doing here? Didn’t the people of this area tell you that you might get bitten by a snake when you enter this field?” And the children answered: “Yes, people tell many tales about the forbidden garden. We also know of one tale, which talks about snakes in the grass that might bite humans. But, this must be a myth because since we have been here we have not seen one snake.” And then they carried on building their fort in this banned area, turning it into their own playground.

By Mary Lindner

ACKNOWLEDGEMENTS

The success of this study was undoubtedly ensured by the support of a lot of people, many of whom I would like to acknowledge in the following pages.

Special thanks go to my supervisors, Prof. Leslie Swartz from the University of Stellenbosch (US), who carefully secured the theoretical and ethical grounds for the study, and Prof. Dieter Kleiber from the Freie Universität in Berlin, who safeguarded the completion of this thesis. I would also like to express my gratitude to Prof. Gudrun Ehlert from the University of Applied Sciences in Mittweida and Prof. Sulina Green from the University of Stellenbosch, both of whom supported the purpose of my study right from the beginning. Dr Yalew Endawoke from the University of Addis Ababa and Dr Fred Mengering from the Technische Universität Berlin, who became valuable sources of fruitful discussions on the design of research instruments and statistical measurements, were instrumental in composing specific columns in this study.

I would also like to name some wonderful women working in the administration centres of foundations and universities who supported this study throughout its duration: Erika Thieme and Ursula Schlupeck from the University of Applied Sciences in Mittweida, Jane Moros and Helga Islam from the German Academic Exchange Service (DAAD), and the International Office team, specifically Dorothy Stevens, at the University of Stellenbosch. Special gratitude goes to the team of women from the Rosa Luxemburg Stiftung (RLS), who facilitated the financial basis of this study.

A person who expressed great trust in my skills and character was Dr Peter Stobinski, ret. Director of the Solidaritätsdienst-international e.V (SODI), which supported the project financially.

I would also like to thank the following people for their support, guidance and comments on my thesis during the long process of evaluating the programme in the field and writing up the results: Thuso Kewana Ceo, for his advice on African culture and community ethics; Songo Fipaza, for spending so much of his time doing the field trips with me; Yeki Mosomothane, for his work on community support and his often direct talks on ethics and the contents of such a programme; Ndudu Ndlebe, for her patience in discussing health purposes in the community with me and for carrying out a health workshop at the community clinic; and Mzwandile Mgabadeli, who always did his best to manage and resolve infrastructural barriers of the project within the school setting.

Then, I would like to name Brandon Ruth and Joy Wilson from Joy for Life, who were undoubtedly my greatest signposts in times of disorientation.

S. Gertrude Gedze, a Xhosa lady, and Anne Curnow, an Afrikaans lady, representing both the old and the new South Africa, supported me in a similar way and always had a warm welcome for me as a visitor to their loved country when I needed it most. People who have always been a tonic of humanism and have to be honoured in this acknowledgement are my friends Alexandra Baer, Heidi Lohmeier, Katrin Morgeneyer, Sebastian Dathe and Jacqueline Sidi-Boumedien. Vera Dittmar holds a special position in this group of people. She has always been the best critic of my work, but also the first emotional pillar when I stumbled, and therefore had a great impact on the success of this work.

During the course of the study the team members of the research and project team became much more than colleagues – they became the Child Mind 'feste'. First of all I would like to thank Christine Buchinger and Christina Otto, who volunteered as research assistants. They always kept in mind to be as objective as possible. The supporting teacher, Roselind Xhamela, was a welcome partner during the intervention phase. She often invested additional time in the project and dealt bravely with resistance against the project in the school setting more than once. In the same way I would like to name Zanele Kobus, the class teacher of the control group at the Nomlinganiselo Primary School, who was always able to incorporate my visits to the school without long pre-meetings and spent so much of her leisure time to meet for discussions on the project. It is difficult to find the right words to express what a great honour it was for me to work with two extremely courageous and open-minded young women, Patricia Mangena and Anneliesa Charmaine Mbena, the leading health promotion trainers in the Child Mind Project (CMP). They gave life to this project against all odds and despite the fears they had or which they experienced in their community.

Most importantly, I am very grateful to and impressed by the parents and children of the intervention and control group, who have always been a ray of hope and a fountain of new experiences and insights for the project, for the research part, and for me.

My final and affectionate acknowledgement is to my parents. Although my time in South Africa was not easy for them, they were always there to support me in my aims. Today I can say that what I really learned from all my experiences in the field is that I was in the privileged position of being able to grow up with loving and caring parents, who always put me first.

This book is dedicated to Anneliesa Charmaine Mbena,
a highly intelligent and courageous young woman
who died under unknown circumstances
after giving birth to her baby boy
in December 2003.

FOREWORD

Convinced that every chapter of this thesis undoubtedly constitutes a piece of the greater puzzle of this research work, I would like to give some advice to readers regarding possible points of interest, so as to simplify the reading process. Readers who have a research background might find it more interesting to focus on the chapters which explain the research model used (chapter 2), the methodology of the study (chapter 6), the research results (chapter 7 to 10) and the final discussion (chapter 11). The chapters listed above would perhaps be of less interest to readers who are actually working in the field of life skills education and AIDS prevention. These readers might be more interested in the chapters which describe the negotiation processes preceding the project (chapter 5) and explain the Child Mind Project with reference to its pedagogical approach and realisation of content (chapter 7). They might also find some useful recommendations for the implementation of similar projects in similar environments in chapter 11. Readers who are unfamiliar with practical research in a developing-world context should focus on the first five chapters in order to enhance their understanding of the difficulties faced by researchers striving to realise their aims and goals in this particular kind of research context.

CHAPTER ONE

Introduction

The United Nations Conventions on the Rights of the Child, the legal foundation for the rights of all children worldwide, pleads for a standard of living with adequate physical, mental, spiritual, moral and social development of children in the present and the future (Article 27). In accordance with the Convention, a 'healthy' child development is defined as one that strives for the *protection* (Article 19), *health and well-being* (Article 24), and *education* (Article 28/29) of the child (United Nations [UN], 1989). However, the reality always appears somehow different from legal ideals.

In 2004, the United Nations Children's Fund (UNICEF) reported that *poverty, conflict and AIDS* are denying more than one billion children worldwide a peaceful childhood. These three conditions create seven basic deprivations that children feel and which have a powerful impact on their futures, namely inadequate shelter, no access to sanitation or clean water, lack of access to information and education, no access to health care services, and food insecurity (UNICEF, 2004). Illustrated on the country South Africa, a positive and healthy child development can be tremendously effected if the chain of the three deprivations – poverty, conflict, and AIDS – is given.

The South African National Department of Health (NDOH) estimates that 14 million (approximately 30%) of the South African population experience food insecurity. Within this context, children, especially those in rural and semi-urban areas, are the most vulnerable to malnutrition which causes health implications ranging from growth failure, a reduced physical and mental capacity in childhood, to an increased risk of developing (diet-related) non-communicable diseases later in life (Mvulane, 2003).

A further problematic nature is the growing AIDS epidemic in South Africa. About a decade ago, the situation regarding the AIDS epidemic in South Africa was better than in some of its neighbouring countries. Today, HIV infection in South Africa is spreading at a rate of at least 1 700 new infections per day; one of the fastest-growing rates of HIV infection in the world. A study by the Human Sciences Research Council (HSRC) (2005) revealed that the highest HIV prevalence can be found in the 20- to 34-year-old age group, among which 24- to 29-year-olds are the worst infected (23.2%). This means, more than half of these new infections occur in young people (Skinner, 2000). Most infected people live in urban informal areas (25.8%) and are African and female (24.4%) (HSRC, 2005).

It has been estimated that by 2010, there will be more than two to three million orphans under the age of 16 who will be fending for themselves and their siblings in what is known as child-headed households (Padayachee, 2004). Thus, the loss of parents through AIDS, for example, puts especially children from socially-disadvantaged backgrounds in moreover unsafe living conditions and exposes them to a magnitude of insecure life situations, e.g. maltreatment and/or exploitation that most probably has negative effects on their physical health and mental well-being.

In other words, the described conditions above, widespread and growing poverty, an increasing intergenerational epidemic and high levels of violence in all its forms, cause especially great concern for those children who grew up in impoverished settings which prove their life more insecure. As it is stated in the United Nations Conventions on the Right of the Child (UN, 1989), interventions who shall improve the living situation for those children most in need must place the greatest emphasis to safeguard their basic needs on protection (Article 19 (1)), health and well-being (Article 24 (1/2), as well as education (Article 29a and b). Whereas *education,* as the third protective column, can be considered as extremely important for two main reasons. Education forms the foundation for the edification of a future society in long-term and in short-term, it can be regarded as the most significant resource to eliminate ignorance and illiteracy and to facilitate access to scientific and technical knowledge that conveys adequate information and skills for the protection and well-being of the individual (UN, 1989, Art. 28).

In regard to the United Nations (1989, Art. 29a), the development of the child's personality, talents and mental and physical abilities to their fullest potential should be in the centre of every educational process. A child needs to be prepared for a responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship with all people, ethnic, national and religious groups and persons of indigenous origin (UN, 1989, Art. 29b). In other words, children and young people have to be considered important segments of the population as targets for any kind of educational purpose that strives to prepare them for present and future life demands. Health-promoting initiatives can be regarded as important and most effective pillars to close the gap between education, health and protection. Because their main goal is to train individuals' life-enhancing competencies and skills, they have an immediate and also a constant effect on the ability of the human to deal with present and future life tasks.

With this conviction in mind, the presented book describes the outcomes of a non-governmental and school-based life skills programme on AIDS and sex education targeting foremost the enhancement of adjusted coping strategies in terms of health, well-being and protective behavioural

competencies for pre-adolescent children. Furthermore, the evaluated school-based life skills programme was characterised by a primary preventive approach, proposing that pre-adolescent children (10-11 years of age) should receive health and sex education before they develop a full value and behavioural system.

The consideration to target pre-adolescent children follows the assumption that pre-adolescents have neither developed health behaviour nor been sexually active, yet. Foremost, during the life stage of pre-adolescents, value and attitude systems only start to enlarge, behavioural patterns are in a permanent probation, bodily changes take place and the individual's social environment expands to no longer just include the family system but also the school and community. In this phase, they also start to formulate rational conclusions, enlarge their observational and testing spectrum, and consequently make decisions which result in concrete individual behavioural patterns. With this knowledge in mind, the conclusion can be drawn that a primary preventive approach can only have the greatest effect if within the participants does not exist an infection with HIV and they do not show risking-taking (sexual) health behaviour.

Chapter 2 opens the argumentation in which it formulates the above assertion into a scientific statement with the presentation of related results of recent studies on the psychosocial causes of unhealthy (sexual) behaviour among South African young people and children that contributes to HIV transmission. With regard to the development of health behaviour during different developmental stages from childhood to adolescence, three examples of risk factors for HIV infection of children and young people in South Africa are discussed. First, socio-demographic factors which have a tremendous impact on the high incidence of HIV in South African society are outlined. Second, sexual abuse of children is very common in South Africa, and not only causes physical injuries but also negatively influences health behaviour from an early age on. In the last instance a description of several studies evaluating the sexual behaviour of adolescents in South Africa is given. These results shall clarify that risky sexual behaviour even exists in these younger populations and causes a further spread of HIV in South African society. As this study is meant to examine the effects of a life skills programme on AIDS and sex education for pre-adolescent children, a theoretical model is introduced. The Social Cognitive Theory (SCT) by Bandura (1986) is presented to explain how learning processes in the interaction between individual, interpersonal, and environmental level take place, and encourage the development of health behaviour amongst the pre-adolescent participants of the programme. Finally, the research model is introduced in conjunction with its independent variable, intervention, and a

range of dependent variables; the psychological indicators such as self-esteem, self-efficacy, and knowledge assess the personal level whilst social competencies on the interpersonal level are studied with regard to gender communication and social responsibility.

The foci of interest in chapter 3 are prevention strategies targeting mainly children and young people in the sub-Saharan region. Governmental and non-governmental school-based health promotion interventions, mainly life skills programmes on HIV/AIDS and sex education, are introduced as main prevention strategies to avoid HIV infection in the next generations. The last part of chapter 3 deals with the specific factors that can influence the implementation and evaluation of school-based prevention programmes, illustrated on the country South Africa.

The location of the health-promoting project was the socially-disadvantaged community "Kayamandi"; located in Stellenbosch in the Western Cape Province in South Africa (Figure 1.1). The socio-demographic conditions within the case study community are highlighted in chapter 4.

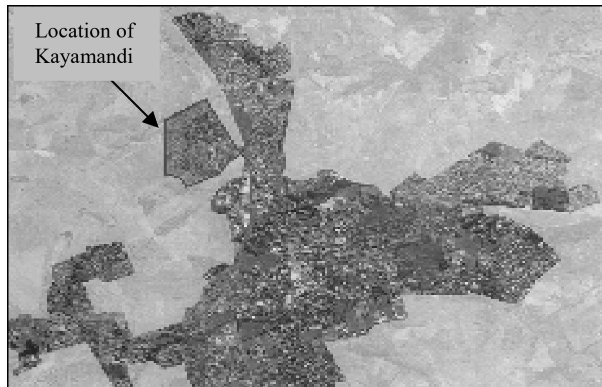

Figure 1.1. Location of Kayamandi Settlement in Stellenbosch (Dennerlein & Adami, 2004).

The description of this particular community is meant to illustrate the need for health interventions for children growing up in comparable living conditions. Thus, the chapter 4 includes a description of the geographical and political history of the case study community, as well as socio-demographic aspects, for example the health status of the population, crime rate and level of education of the population. The same chapter concludes with a

description of the existing infrastructure, which can also be interpreted as a needs analysis to embed this study in its physical context.

Chapter 5 illustrates research conditions for psychology and health research in third world conditions. The aims, objectives, ethics and context of research are outlined before describing specific negotiation procedures on community, school, and personal level. Finally, challenges that arose from unanticipated events and the resulting limitations that affected the quality and design of the survey are reported.

The methodology of the study is outlined in detail in chapter 6. The study used three types of evaluation to reach an in-dept view on the personal, interpersonal and social context of the undertaken intervention. The *needs analysis*, taking into consideration the risk-resource approach (see also Hurrelmann, Klotz, & Haisch, 2004), examined risks and resources for child health in the case study community. Information for the needs analysis was drawn from regular field trips and field reports, an extensive literature review (e.g. maps, official statistics, published and unpublished articles), and accompanying photographic documentation. Main emphasis was put on the qualitative instrument of field interviews, undertaken with nine experts working in governmental and non-governmental institutions in the field of education, health, social and public welfare in the case study community. The instrument gathered data on the growing risks and resources in the socio-economic conditions and family life, as well as on the quality of educational and health care sectors. A *process evaluation* was applied with the use of the qualitative instruments of the health promotion trainers' (HPTs) reports and project documentation, and with combined quantitative-qualitative instruments of the learners' reports and participant observations of four children in the intervention group (IG). These instruments analysed the effect of the model by measuring the cognitive and emotional convictions among children (learners) and facilitators (HPTs). The *outcome evaluation* used two major instruments: a self-administered questionnaire and an opinion poll. The questionnaire, based on a quasi-experimental research design with four test phases, contains three psychological variables (self-esteem, self-efficacy, knowledge on HIV/AIDS) and two social variables (gender communication, social responsibility) which are assumed to encourage the development of cognitive and social competencies to cope with prevalent life tasks and to enhance mental and protective health behaviour, also for later life stages. The opinion poll was conducted in which learners expressed their long-term attitudes towards the programme, as well as attitudes towards their physical living environment.

Chapter 7 contains, foremost, a description of the implementation process of the evaluated intervention. A specifically designed non-

governmental school-based life skills programme on AIDS and sex education for primary school children, formerly designed by the Planned Parenthood Association of South Africa (PPASA) in 1997, formed the foundation of the evaluation study. During the implementation process extensive modifications were made, so that the applied life skills programme accommodated existing cultural, contextual and developmental specifics of the participating children. A general explanation of the programme's pedagogical concept is given and linked with implementation procedures and coordination structures. Furthermore, the networking of the project with governmental and non-governmental institutions within the Kayamandi community is outlined in detail. Finally, special events such as cases of corporal punishment at school and sexual child abuse in the intervention group, which are assumed to have hindered the intervention and compromised the outcome of the life skills programme on the individual level, are discussed.

Chapter 8 describes the process assessed by health promotion trainers as part of an instrument to evaluate the quality of teaching, based on their self-confidence to teach in their position as trainers and to implement the programme in the classroom. In addition, learners' attitudes towards the programme and its methodology, and their ease with HPTs and classmates of the same and the other gender are presented. The chapter is concluded with the results from the participants' observations of the social behaviour of two girls and two boys during intervention sessions over a period of seven months. These observations illustrate the appropriateness of the intervention targeting the specific age group.

Chapter 9 contains the results of the outcome evaluation. The effects of the intervention are presented by means of the analysis of the quantitative instrument, the self-administered questionnaire. The results of the socio-demographic, psychological, cognitive and social competency research variables are presented descriptively and statistically; this is followed by a discussion of gathered quantitative data within the intervention group. An investigation into the specific segments of the model, for instance HIV/AIDS and sex education, and their learning outcomes, illustrate from a broader perspective the relevance of the intervention in terms of influencing knowledge, attitudes and skills regarding HIV/AIDS. The chapter concludes with the presentation of the results from the first part of the opinion poll that evaluated learners' long-term attitudes towards the learning programme eight months after the end of Intervention II.

Chapter 10 examines in more detail the social factors influencing child development in a disadvantaged living environment such as Kayamandi from the perspective of experts working in governmental and non-governmental organizations (NGO). The chapter revisits the literature review in chapter 4

and gives a more personal depiction of the living and growing-up conditions of children in Kayamandi. The ethnic diversity and cultural heritage of the inhabitants of the community are presented, followed by a description of the prevailing socio-demographic conditions, for example risky health conditions, prevalent childhood diseases, lack of security and socialisation pillars (families, school system). The underlying goal of the chapter is to develop an understanding of the outside factors that could have influenced the intervention unintentionally and with it uncontrolled. At the end of the chapter results from the second part of the opinion poll are presented, where children were given the chance to speak about and identify their needs and demands in their community.

Chapter 11 summarizes and discusses specific research findings regarding effects on the individual and interpersonal domain as well as the applicability of the programme and the identification of contextual conditions influencing the outcomes of such a health promoting initiative. Conclusions and recommendations are included in the argumentations and made for further research investigations on child development, as well as for the improvement of the applicability of a similar life skills programme on AIDS and sex education within the described social context.

CHAPTER TWO

Psychosocial Causes of Unsafe Health Behaviour of South African Children and Adolescents

2.1 Introduction

According to the World Health Organization (WHO), the term 'health' is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2001). To build up on the WHO's theoretical concept of health this study follows health promotion approaches (see also Hurrelmann et al., 2004), that understand health-related behaviours as being always formed by risk and protective factors which are based on three domains: physical, psychological and social. Thus, the focus of interest in chapter 2 is the presentation of an extensive literary review of different studies, especially those from South Africa. The objective of the chapter is to explain the diverse psychosocial factors pertaining to the development of mental and physical health among children and young people[1] that makes them vulnerable to HIV infection. The first part of this chapter, therefore, explains how health-related behaviour[2] develops from childhood to adolescence, and presents specific psychosocial risks and resources effecting the development of health behaviour among children and adolescents in South Africa.

The second part of the chapter describes foremost the theoretical basis and the designed model for this thesis. The Social Cognitive Theory (SCT) by Bandura (1986) forms the theoretical basis for the evaluation of the acquisition of cognitive and social competencies or rather learning processes of children participating in a specific primary preventive approach, that is, a life skills programme on AIDS and sex education. Due to an absence of research findings on pre-adolescents, the research model used and the relevance of the examined variables are explained by describing results from studies on (unsafe) sexual behaviour among South African adolescents.

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1 In this study the terms 'youth' and 'young people' also refer to the stage of adolescence.

2 In addition, the following chapters use the term 'health behaviour' or 'risky health behaviour', and not 'sexual behaviour' as in other studies, because it is assumed that pre-adolescents have either not yet developed health behaviour or been sexually active.

2.2 HIV/AIDS Epidemic and its Impacts on the South African Society

According to the Joint United Nations AIDS Programme (UNAIDS) and the World Health Organization 40.3 million people currently live with HIV worldwide. Almost five million people were newly infected with HIV and 3.1 million died of AIDS in 2005. The sub-Saharan region has the highest number of HIV infection with 25.8 million people. This means, approximately 65% of all people infected with HIV live in this region and 77% of all infected human beings are African women (UNAIDS/WHO, 2005a). UNAIDS stated in its last report on the situation of the global AIDS epidemic that the total number of people living with HIV reached its highest level in 2005 with increasing prevalence on other continents. The conclusion reached by the same organizations in 2005 was that a reduction of the AIDS pandemic could not be foreseen (UNAIDS/WHO, 2005a).

According to UNAIDS (2002), the youth are at the centre of the global HIV/AIDS pandemic as the next generation who has to face a cumulative impact in the forthcoming years. The predictions are that a large part of the young generation, as the most infected, will be unable to raise and educate their children. The current number of 14 million AIDS orphans and terminally ill people (UNAIDS, 2002) is on the increase worldwide and without adequate treatment and care, most of them will not survive the next decade (UNAIDS/WHO, 2001). To make matters worse, most of these infected people are unaware of carrying the virus, many millions more know nothing or far too little about HIV and how to protect themselves against it (UNAIDS/WHO, 2001). Regarding taboo issues such as sex, death and illness, stigmatisation of HIV-positive people is high. Therefore, many infected people decide not to disclose their status to relatives or neighbours because they are afraid of becoming social outcasts (Campbell, 2003). The consequence of such taboos and fear is a difficulty in reducing HIV: either preventive action does not reach the most vulnerable human beings or it cannot be sufficiently and effectively implemented. Furthermore, the HIV epidemic affects mainly low- and middle-income countries, it has tremendous impacts on the stability of societies putting an additional burden on their economic, political and health systems.

South Africa has one of the highest numbers of people living with HIV worldwide. According to the National Department of Health (2004a) it is estimated that between 5.7 and 6.2 million South Africans are currently living with the virus and 1 700 more people are infected with this virus every day. The statistics on HIV prevalence in South Africa, however, consistently